NOVEMBER-DECEMBER 2010

ARMENT SUSTAINMENT

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THE 3D EXPEDITIONARY
SUSTAINMENT COMMAND
SUPPORTS DISASTER RELIEF

Army Field Support Brigades
Lessons Learned in a Multifunctional Medical Battalion
Sustaining a BCT in Southern Iraq

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COVET: The U.S. response to January's devastating earthquake in Haiti required the 3d Sustainment Command (Expeditionary) (ESC) to deploy into an expeditionary environment to support humanitarian assistance and disaster relief operations. To execute this no-notice mission, the command's Soldiers had to adapt to conditions for which their previous deployments to Operation Iraqi Freedom offered few precedents. The articles beginning on pages 4 and 9 describe how the command deployed and operated in Haiti and the numerous "firsts" it had to accomplish in order to succeed. In the cover photo, 3d ESC equipment

bound for Haiti is loaded onto a C-17 Globemaster transport at Louisville International Airport in Kentucky on 27 January. (Photo by Kentucky Air National Guard)



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of Logistics Reporting Tool—Sergeant Benjamin Kibbey, USAR

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FOCUS

International Recruiting Summit

BY DONALD D. COPLEY, JR., AND JULIA C. BOBICK

uring the third week of March 2010, the Army Recruiting and Retention School and recruiting representatives from nine nations gathered at the U.S. Army Recruiting Command (USAREC) head-quarters at Fort Knox, Kentucky, to engage for the first time in open dialog about recruiting processes and technologies.

"The command has always received foreign visitors interested in learning about how we recruit," said Rick Ayer, director of the USAREC commander's initiatives group and coordinator for the command's first International Recruiting Summit. Ayer added that the Recruiting and Retention School at Fort Jackson, South Carolina, has run a program for years that sends recruiting officers and noncommissioned officers to other countries to teach recruiting practices and to help establish volunteer forces. Yet, the Army had never conducted a formal recruiting and retention workshop or conference with other nations.

During a visit to the Recruiting and Retention School, Major General Donald M. Campbell, Jr., the USAREC commanding general, discussed the large number of international visitors to both the recruiting command and the schoolhouse with Brigadier General Mark A. McAlister, the Army Soldier Support Institute commander. Together, they developed the idea of initiating a forum in which the Army and its international partners could collaborate and exchange ideas.

USAREC invited 15 countries to participate—some that already had been working with the command or the Recruiting and Retention School and some that had approached the Department of the Army and the Army Training and Doctrine Command to learn more about recruiting. Some of the invited nations had been recruiting for all-volunteer forces for some time, while others had not yet established all-volunteer forces. Nine nations sent representatives: Afghanistan, Estonia, France, Germany, Greece, the Netherlands, Romania, Taiwan, and the United Kingdom.

Lieutenant General Benjamin C. Freakley, commanding general of the Army Accessions Command, told summit attendees that the U.S. all-volunteer force has been around for over 40 years. "We've learned a lot along the pathway to sustaining an all-volunteer force. . . . It is critically important to us that we share lessons learned with our partners and allies [and] we want to learn from you." Freakley reinforced the idea of the open forum during his remarks to the group via video teleconference.

The 3-day event centered on five primary areas: the recruiting process and operations; market intelligence; marketing, public affairs, and outreach; manning the force; and training the recruiting force. In the mornings, the group discussed challenges common to many of the countries. However, they only had time to delve briefly

Brigadier General
Philipe Ponties, Assistant
Manager for Recruitment
and Vocational Training for
the French Army Human
Resource Management
Command tries out a video
game at the Elizabethton,
Kentucky, recruiting center.
(Photo by Julia Bobick,
Recruiter Journal)



into potential solutions to individual issues because of the tightly packed schedule.

In the afternoons, the representatives toured the Army Accessions Support Brigade on post, the Elizabethtown

Recruiting Station, the Louisville Military Entrance Processing Station, and the command's recruiting operations and cyber recruiting centers.

"We're all in the same business, we're open to good ideas and willing to share ideas that work," said Brigadier J.T. Jackson, United Kingdom Director of Recruiting and Training (Operations). Jackson, who had previously visited the command as part of a recruiting partnership exchange, said that after seeing USAREC's Partnership for Youth Success program, the United Kingdom had begun working on changing the way it markets its army. In the past, its army had been promoted as a career. He noted, however, that in doing so it was missing out on developing links with business and industry to sell army service as a short-term job with future potential, as the U.S. Army is doing with the Partnership for Youth Success.

Campbell called the event "beyond his wildest dreams successful." He added that he hoped this collaboration would foster relationships not previously realized and serve both USAREC and its recruiting partners well in establishing and modernizing recruiting business practices. "Just as we do among friends in our personal lives, we are acting as sounding boards for each other to ensure we do the right thing efficiently and accurately in the recruiting processes," he said.

Campbell stated that he would like the summit to become an annual event and welcomed the opportunity to host it again next year.

DONALD D. COPLEY, JR., IS THE DIRECTOR OF TRAINING AND PERSONNEL DEVELOPMENT AT THE RECRUITING AND RETENTION SCHOOL AT FORT JACKSON. SOUTH CAROLINA.

Julia C. Bobick is a writer-editor for Recruiter Journal at Fort Knox. Kentucky.

The Logistics Branch: Multifunctional *and* Functional

BY LIEUTENANT GENERAL MITCHELL H. STEVENSON

read with interest the article on the Logistics Officer Corps in the September–October 2010 issue of *Army Sustainment* magazine. It contained good thoughts (although, as a point of clarity, the Logistics Corps did not become a "branch" on 1 January 2008; rather, the Logistics (LG) Branch was created on that date and became the fourth branch, along with Quartermaster [QM], Ordnance [OD], and Transportation [TC], of the Logistics Corps). I think this article was very timely.

However, I've sat through some briefings recently and listened to some exchanges on this topic, and I am a little concerned that, as an institution, we have not yet grasped what we put into place on 1 January 2008. I hear logistics officers continuing to be unsure as to whether they are OD (or QM or TC)—or LG. Of more concern is the notion that any logistics officer can do any job, so why pay attention to an officer's functional area of expertise?

ANY LG OFFICER SHOULD BE ABLE TO DO ANY JOB CODED 90A. BUT WE SHOULD AVOID TAKING THE POSITION THAT ANY LG OFFICER, REGARDLESS OF REGIMENT, CAN DO ANY AND ALL FUNCTIONALLY CODED JOBS.

So, let me take the central theme of the article and highlight some of the key points for all.

Logistics officers (no matter what regiment they were accessed through) are LG upon graduating from the Combined Logistics Captains Career Course (CLC3)—Period. Our intent is for the officer to think of himself first and foremost as a multifunctional logistician. (An exception is the explosive ordnance disposal [EOD] officer, who, because of the unique requirements of that critical function, we rotate between EOD and ammunition assignments.)

However—and this is very important—every LG officer is required to have a functional area of expertise. You can generally tell what that area of expertise is by the regimental insignia that the officer wears and the regiment (TC, OD, or QM) with which he or she associates. We want this! It is crucial to the health of

our Logistics Officer Corps! It is not a bad thing for LG officers to associate themselves with their regiment and be proud of the particular functional expertise that they, as members of that regiment, bring to the table.

What that means (or should mean) to the officer is that if he is a member of (for example) the Ordnance Regiment, he brings an expertise in things maintenance and munitions that no other officer can bring to the table. It also means that the officer must continue in self-study and look for developmental opportunities to sharpen that expertise throughout his career. Assignment and professional development managers in the Army Human Resources Command can help by ensuring that officers rotate between multifunctional jobs and functional jobs as much as possible throughout their careers. (I realize this is harder to do the more senior the officer is, but personnel managers must nonetheless factor in how long the officer has been away from a functional assignment, the same way they work to ensure multifunctional opportunities).

If you look at how we coded the positions for logistics officers on tables of organization and equipment and tables of distribution and allowances (and we've rescrubbed this three times in the past 4 years, honing it to a pretty good reflection of the skills each job really requires; the charts in the September–October article make this clear), they are not all coded 90A! We could have done that, but we deliberately did not because we recognize the fact that jobs remain out there (though they are a minority of the total logistics jobs, especially at the more senior grades) that are more functional than multifunctional and thus require a particular skill and experience.

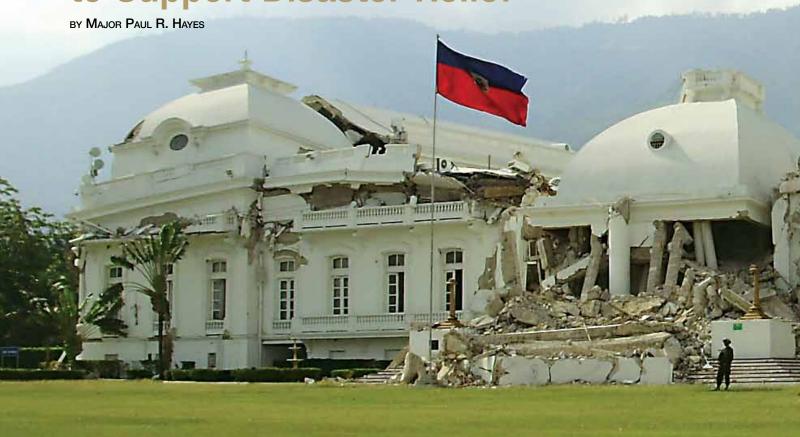
Yes, it is absolutely right that any LG officer should be able to do any job coded 90A. (An exception again is the EOD officer.) But we should avoid taking the position that any LG officer, regardless of regiment, can do any and all functionally coded jobs.

I hope this makes sense. It's all laid out in Department of the Army Pamphlet 600–3, Commissioned Officer Professional Development and Career Management. However, if you have questions, please bring them up on the net. Healthy debate and dialog and questions make us better. Disagreement is not disrespect!

Army Logisticians—Always There—Always Ready!

LIEUTENANT GENERAL MITCHELL H. STEVENSON IS THE DEPUTY CHIEF OF STAFF, G-4, DEPARTMENT OF THE ARMY.

Deploying an Expeditionary Sustainment Command to Support Disaster Relief



ith a unit history stretching back to the Korean War, the 3d Sustainment Command (Expeditionary) (ESC) has often deployed to provide logistics expertise and sustainment to the warfighter. Since 2003, the 3d ESC has deployed three times to support Operation Iraqi Freedom (OIF) and moved its headquarters from Germany to Fort Knox, Kentucky. But throughout its rich history, the 3d ESC has never been called on to deploy into an expeditionary environment to support humanitarian assistance and disaster relief operations.

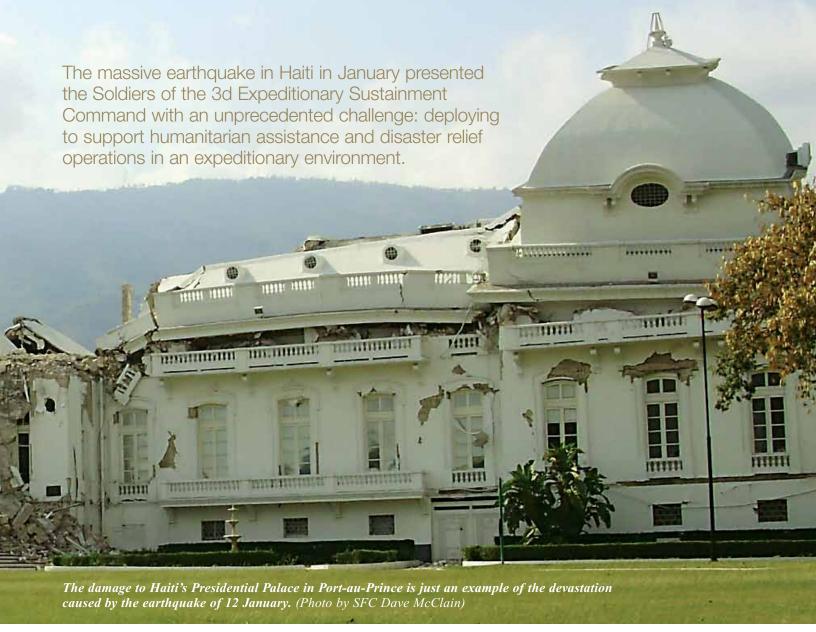
But on 12 January 2010, a devastating earthquake in the Caribbean nation of Haiti led to exactly that scenario. To support Operation Unified Response, the U.S. military's mission to assist the suffering people of Haiti, the 3d ESC deployed into an immature theater that challenged the resourcefulness of its Soldiers and required them to accomplish a number of unit "firsts." This article and the one that follows

tell the story of how the 3d ESC deployed to and operated in Haiti.

Timing of the Operation

When the 7.0-magnitude earthquake struck Haiti, the 3d ESC was 25 days away from completing the 180-day reset phase of the Army Force Generation (ARFORGEN) cycle after returning from a 15-month deployment to Iraq. Although the unit initially received no orders to deploy to Haiti, it was a real possibility that the skills and capabilities of the only active-component ESC in the continental United States at the time would be needed for humanitarian assistance and disaster relief operations.

As expected in the ARFORGEN reset phase, the unit's available strength was in flux. The ESC could fill only about 50 percent of required joint-manning document positions needed to man the Joint Logistics Command (JLC). Most of the unit's equipment was out of reset, but



the command had not yet filled shortages in tentage and other associated field life-support equipment. When the earthquake hit Haiti on 12 January, the 3d ESC was feeling the effects of manning, equipment, and training limitations stemming from the turbulence of reset.

Developing the Task Organization

Only 4 days after the earthquake, the 3d ESC headquarters began its contribution to the humanitarian assistance and disaster relief effort in earnest. On 16 January, the first elements of the command were committed to the Haiti relief effort. The 3d ESC's commanding general and several planners departed Fort Knox for the U.S. Southern Command (SOUTH-COM) headquarters in Miami, Florida, to contribute to the sustainment planning effort for a U.S. military response to the Haiti disaster.

In what was a first for the ESC headquarters, their work was guided not by a contingency plan or combat

orders but by what the planners anticipated might be needed in Haiti to support its people in a time of crisis. Relying on the modular structure and standardization of sustainment forces across the military, the planners effectively researched unit capabilities and applied them to the anticipated requirements. This ultimately saved planning time and ensured that the proper units were requested to deploy in support of the mission.

Thanks to existing 3d ESC training and readiness authority relationships, the unit's planners were familiar with the readiness levels and availability of many of the sustainment units that were later selected for contingency deployment to Haiti. As reception, staging, and onward movement commenced, the ESC headquarters also observed the effectiveness of existing command and control relationships to make daily sustainment operations more efficient. These observations set the conditions for effective employment of Army watercraft in support of joint logistics

over-the-shore operations and the use of mortuary affairs teams in support of Joint Task Force-Haiti and Department of State recovery operations.

Prioritizing Logistics Force Flow

One of the challenges faced by 3d ESC planners in the early stages of the operation was setting priorities for the force flow into Haiti. With logistics forces competing for priority airflow into Haiti, sustainment and humanitarian assistance requirements quickly outpaced logistics capability on the ground.

In addition to deploying its own headquarters, the 3d ESC faced the daunting task of prioritizing and advocating for the deployment of all sustainment forces into theater that would constitute the JLC. The last sustainment forces did not arrive in Haiti until 7 February—25 days after the earthquake.

Deployment from Fort Knox

While elements of the 3d ESC were engaged in planning at SOUTHCOM, the remainder of the head-quarters readied itself to deploy to Haiti. Between 13 January and 3 February, the 3d ESC headquarters deployed personnel and equipment from Fort Knox.

The deployment began on 13 January, when one 3d ESC planner deployed to Fort Bragg, North Carolina, to support the XVIII Airborne Corps' planning efforts. On 16 January, six 3d ESC personnel, including the commander, deployed to Haiti via the SOUTHCOM headquarters in Miami, followed by the deputy commander and operations sergeant major on 17 January. On 27 January, the 3d ESC advance party of 31 Soldiers deployed to Haiti on a C-17 Globemaster transport, with the 60-Soldier main body deploying aboard another C-17 on 3 February.

Although this was not the first time the headquarters had deployed, it was the first time the headquarters had deployed in a contingency and an expeditionary framework. Conditioned by deploying into a mature theater of operations (OIF in 2003, 2005, and 2008) with long leadtimes, the unit had never before deployed on short notice or during the reset phase of ARFORGEN.

But while this first contingency and expeditionary deployment from Fort Knox had its challenges, it proved that the unit's Soldiers were adaptive and innovative. Despite a lack of rapid deployment experience, both within the unit and within the Fort Knox installation staff, the ESC was able to successfully meet the challenges of reset, prepare Soldiers and equipment for movement, and deploy by military airlift to Haiti to provide sustainment and distribution expertise to the relief efforts.

An Expeditionary Environment: Not OIF

Another first for the 3d ESC was deploying into a theater that was not mature. Natural disasters occur without notice and pose significant challenges. Compared with deployments to Iraq and Afghanistan, where many factors were "knowns," limited information on the overall situation in Haiti was available initially and the infrastructure to support the unit was austere.

Although U.S. involvement in Haiti is not uncommon historically, the 3d ESC maintained no information on the security situation and infrastructure in Haiti. From the time of the earthquake until the final unit elements deployed on 3 February, the staff continually conducted mission analysis and intelligence preparation of the operational environment. This effort provided the commander with the best information available on the security situation following the earthquake, infrastructure capabilities within the area affected by the earthquake, and the unit's capabilities to provide support to the humanitarian assistance and disaster relief operations.

When the 3d ESC was notified for deployment, it appointed liaison officers with the XVIII Airborne Corps and SOUTHCOM to assist the headquarters with requests for forces and matching logistics capa-

bilities with emerging requirements. The command also coordinated with United Nations forces and numerous international aid organizations to accomplish support and distribute aid once deployed.

Equipment is loaded on a 7th Sustainment Brigade landing craft utility at Fort Eustis, Virginia, on 16 January in preparation for deployment to Haiti. The 3d ESC had never been challenged before to deploy on short notice or during the reset phase of ARFORGEN. (Photo by SFC Kelly Jo Bridgwater)





In contrast to Iraq, only the most basic field services were available to troops in Haiti. The lack of support functions meant that Haiti provided a first test of field craft skills for many Soldiers in the 3d ESC. (Photo bv MAJ Paul Hayes, 3d ESC PAO)

medium tent, emplaced concertina wire, washed their own clothes by

hand, or eaten only meals ready-to-eat for 30-plus days. In addition to providing direct support to thousands of Haitians desperately in need of assistance, Soldiers were also trying to survive the elements themselves.

The institutional knowledge possessed by senior noncommissioned officers (NCOs) with Desert Shield and Storm experience helped teach young Soldiers how to survive and stay healthy in the hot, unforgiving climate. For the command's most senior NCOs—sergeants major, master sergeants, and very seasoned sergeants first class—it was truly an opportunity to teach, coach, and mentor Soldiers on basic field standards and camp planning and establishment.

Soldiers also received training in building field showers, washing clothes in the field, and maintaining the essentials of field sanitation. The knowledge gained through this deployment reinforced the importance of basic Army field craft training and proved that this training is critical to developing adaptive Soldiers. In all, 3d ESC Soldiers proved adaptive and ready to tackle the austere conditions in Haiti. As a testament to their resilience and spirit, 17 Soldiers reenlisted during the first-ever 3d ESC mass reenlistment ceremony in Port-au-Prince on 27 February.

First Deployment Without TPE

Operation Unified Response was the 3d ESC's first deployment in which it did not fall in on theater-provided equipment (TPE). In fact, all units supporting the operation deployed with their organizational property book equipment. For the 3d ESC, some of its equipment was still in the Army's left-behind equipment program. Without knowing the specific requirements of the mission, unit leaders determined, based

To accomplish the mission, the 3d ESC required robust network connectivity, which was not organic to the unit. The unit experienced communications challenges created by operating under numerous elements, resulting in limited connectivity to support all requirements. From maintaining situational awareness, coordinating requirements, and obtaining workspace and network access to improving living conditions, the austere environment in Port-au-Prince, Haiti's capital city, presented numerous challenges to the unit.

First Test of Soldier Field Craft Skills

Haiti proved to be a first test of field craft skills for many Soldiers within the 3d ESC. Essentially, it was back to the basics in Army field craft. Many of the Soldiers within the command had deployed at least once to OIF or Operation Enduring Freedom (OEF). There, Soldier support functions, such as containerized shower units, dining facilities (many serving food and drinks 18 hours a day), laundry service, gyms, movie theaters, internet cafés, and libraries, are routinely provided by units or contractors. For the most part, duty in Iraq and Afghanistan is relatively comfortable because many personnel and agencies work diligently to provide quality services for Soldiers during a 12-month deployment.

Conditions were different in Haiti. Services such as laundry and bath, dining facilities, internet cafés, and gyms were not provided. For young Soldiers or those who had deployed only to mature theaters, being informed that they had to pack additional items, like a small box of soap powder (not liquid), clothespins, and a clothesline, was an eye-opening experience.

The command realized early that some Soldiers (even young sergeants) had never erected a general purpose



Rains increased the importance of field sanitation skills. (Photo by SFC Dave McClain)

on their experience, what equipment would most likely be used. Complicating efforts was the fact that the 3d ESC had not deployed its organic equipment since the early rotations of OIF.

The unit had to build its load plans and unit deployed list without knowing the operational environment in Haiti. While all units in the Army are different, the 3d ESC had become accustomed to drawing TPE in mature theaters to execute its mission while deployed. The mission in Haiti proved that, regardless of whether or not deploying units are going to be drawing TPE, units still need to place their equipment readiness high on their list of priorities.

First Test of the ESC's MTOE

Another unexpected first during Operation Unified Response was the testing of the 3d ESC's modification table of organization and equipment (MTOE). Could the ESC deploy to an expeditionary environment with personnel and equipment authorized on its current MTOE and successfully execute its mission?

Haiti was an immature, austere theater of operations, which meant that units had to deploy solely with their authorized, available MTOE equipment. The impact of this equipment set on operations was immediately felt on the ESC's arrival in Haiti.

For example, ESCs are not organically equipped with signal support other than the personnel in their G–6 section. Doctrinally, they should be supported by an expeditionary signal battalion. During Operation Unified Response, the JLC initially had nothing to provide communications for the users in its headquarters except for services provided by the Multi-Media Communications System (MMCS) brought to the theater by the Army Materiel Command element attached to the JLC.

The MMCS provided a limited number of voice and data lines. That was enough for the early arriving

elements to begin communicating with joint task force elements. Later in the deployment, the XVIII Airborne Corps J–6 worked with the Joint Communications Support Element (JCSE) to provide a team with organic satellite equipment to augment the headquarters.

The purpose of the JCSE team was not to provide a permanent communications solution for the JLC but to provide enough NIPRNET (Non-secure Internet Protocol Router Network), SIPRNET (Secure Internet Protocol Router Network), VOIP (Voice over Internet Protocol), and video teleconferencing capability for the command to reach initial operating capability. Once the 24th Air Expeditionary Group arrived in Haiti, it provided a "line of sight shot" across the airfield that permitted more user access to voice and data services.

This mission was also the first in which the 3d ESC was forced to use its organic equipment since it had relocated from Germany to Kentucky. The OEF and OIF model allows units to consider TPE sets as part of their planning assumptions. Since Haiti had no TPE, units were required to deploy as they were.

Outside of communication, the greatest impact was felt in life support, including tents, generators, and light sets. Some of this equipment had not been used for over a year and presented a steep learning curve for those setting up and operating it for the first time. Fortunately, the ESC was able to use some temporary life-support equipment sets belonging to the Federal Emergency Management Agency that were available at the Haiti Airport to address requirement shortfalls. The ESC also relied on experienced senior NCOs to provide onsite training to Soldiers who had not experienced this level of field craft before.

Conditioned by multiple deployments to Iraq, the 3d ESC was forced to adapt and learn how to deploy into an austere environment in support of humanitarian assistance and disaster relief operations. Although they lacked experience in this area, the adaptive Soldiers of the command were able to deploy from reset and tackle challenging missions and conditions in Haiti. Throughout its preparations and actual deployment, the command was able to continually set the conditions for successful support of Operation Unified Response.

While the contingency deployment to an expeditionary environment resulted in a number of firsts for the command, a number of other firsts would enable joint forces to provide the initial relief to the Haitian people. The article beginning on page 9 examines the contributions of the 3d ESC to relief operations.

Major Paul R. Hayes is the public affairs officer of the 3d Sustainment Command (Expeditionary) at Fort Knox, Kentucky. The command would like to thank the many individuals who contributed to this article.

A Series of Firsts: The 3d ESC in Operation Unified Response

BY MAJOR PAUL R. HAYES

efore deploying to Haiti in response to the devastating 12 January 2010 earthquake, the 3d Sustainment Command (Expeditionary) (ESC) had never deployed into an expeditionary environment to support humanitarian assistance and disaster relief operations. After its main body arrived in Haiti on 4 February 2010, the 3d ESC quickly realized that the scope and focus of its logistics mission was very different from its previous deployments to Iraq. With adaptive Soldiers and a diverse collection of logistics units, the command accomplished a series of historic firsts.

Mortuary Affairs Teams

Operation Unified Response in Haiti was the first time Army mortuary affairs assets and the Department of Health and Human Services (DHHS) Disaster Mortuary Operational Response Team (DMORT) operated jointly to locate, recover, identify, and return the remains of U.S. citizens to the continental United States (CONUS) for final disposition. Operating from the Port-au-Prince airport, the Army mortuary affairs personnel and DMORT successfully returned the remains of 34 U.S. citizens killed in Haiti.

Every aspect of the effort was an opportunity to learn and improve the interoperability of Army mortuary affairs and DHHS assets. The major learning events during Operation Unified Response involved understanding the critical role of a theater mortuary affairs office, integrating Army mortuary affairs policy and procedures with DHHS policy and procedures, and understanding the capabilities and operational differences between DMORT and Army mortuary affairs assets.

In every military operation, a theater mortuary affairs office must be established in the initial planning stages. This applies to both conventional and humanitarian assistance operations. Initially, no requirement existed for a theater mortuary affairs office in Haiti. As a result, recovery operations were temporarily hindered while decisions were made about the disposition of local-national remains and which agency would take the lead in coordinating recovery operations. Afteraction review comments indicate recovery operations in Haiti would have been greatly improved if a theater mortuary affairs office had been immediately established to function as the central agent for Army mortuary affairs while liaising with the Incident Command System (ICS).

ICS operations differ from conventional Army mortuary affairs operations in both doctrine and procedures. In general, ICS operations respond to catastrophic emergencies within the United States while Army mortuary affairs operations are conducted outside CONUS. Operations in Haiti took the ICS mission beyond U.S. borders.





A member of the deployment/redeployment coordination cell briefs redeployment operations during a rehearsal of concept drill at Joint Logistics Command headquarters. (Photo by MAJ Paul Hayes)

In view of this expanded role and in preparation for the likelihood of future operations of a similar nature, Army mortuary affairs units should develop a training and operations relationship with DHHS. Both agencies need to be familiar with the policies and procedures that are

specific to each organization and understand how policy differences could affect combined efforts. Both organizations need to understand the other's capabilities and shortcomings in order to provide complementary support in future operations.

DMORT provided the mortuary affairs Soldiers with a unique opportunity for technical growth and hands-on experience in the remains identification process. Army mortuary affairs procedures allow for the preservation and expeditious evacuation of forensic media from a theater of operations for further review. In Haiti, DMORT teams working with Army mortuary affairs Soldiers conducted in-theater forensic reviews that led to the positive identification of remains. The 3d ESC mortuary affairs personnel had never before completed forensic reviews prior to repatriation.

Support to the World Food Program

One of the most important missions that the 3d ESC performed in support of Operation Unified Response was logistics support to the World Food Program's food distribution operation. During this operation, Soldiers from the 119th Inland Cargo Transfer Company (ICTC), serving under the command and control of the 530th Combat Sustainment Support Battalion (CSSB), supervised the loading, movement to the humanitarian support area (HSA), transloading, and staging of rice.

As the 530th CSSB depleted existing warehouse stocks of rice, the 10th Transportation Battalion delivered the additional volume required to provide rice to the Haitian population. The 97th Transportation Company offloaded incoming vessels, and the 119th ICTC trans-

loaded the rice onto trucks. Soldiers from the 10th Transportation Company augmented existing local civilian transportation and moved rice to the HSA.

Nongovernmental organizations, with the assistance of U.S. and United Nations security, took the rice from the HSA to distribution points throughout Port-au-Prince. Over 2.98 million people received a week's worth of rice (a total of 12,432 metric tons), mitigating the suffering of the Haitian people and providing a foundation for stabilization and recovery.

Army Watercraft Command and Control

Never before had the 3d ESC been responsible for Army watercraft command and control and management. This changed with Operation Unified Response. The 3d ESC provided the command and control of Army watercraft performing the expeditionary joint logistics over-the-shore and humanitarian aid and disaster relief missions. Watercraft led by the 10th Transportation Battalion under the 7th Sustainment Brigade completed 103 missions and logged over 32,000 nautical miles in support of Operation Unified Response. The 97th Transportation Company provided six landing craft utility, and the 335th Transportation Company provided a logistics support vessel.

Along with their counterparts from Navy Beach Group Two, these Soldiers and watercraft provided critically needed ship-to-shore download and helped mitigate the operational impact of a port devastated by the earthquake. The 492d Transportation Detachment (Harbormaster Operations) coordinated waterborne operations, and the 73d Transportation Company provided large-tug capabilities. Some of the more unique watercraft missions included carrying trucks loaded with relief supplies and ferrying Army veterinarians to different cities around Haiti to vaccinate animals in support of the Haitian Ministry of Agriculture. Traveling to locations by ground was often impossible because earthquake damage made routes impassable.

Health Service Support Missions

Another first for the ESC was managing health service support in a humanitarian assistance operation. Given the number of casualties, medical care was one of the first essential services required to aid the citizens of Haiti. The medical personnel activated in support of Operation Unified Response were directed to deploy with a 30-day supply of surgical and medical equipment, including medical-grade oxygen tanks.

Kelly USA, located in San Antonio, Texas, was designated as the theater lead agent for medical materiel. This company assumed responsibility for providing

direct class VIII (medical materiel) support to active ground forces. After receiving the requisition, Kelly USA coordinated shipment through direct liaison with U.S. Army South (ARSOUTH) and the Defense Logistics Agency (DLA). ARSOUTH and DLA coordinated the packaging and transportation of supplies from CONUS to Port-au-Prince.

The 583d Medical Logistics Company, Joint Task Force-Haiti (JTF-Haiti), the Joint Logistics Command (JLC), the 56th Multifunctional Medical Battalion (MMB), the U.S. Agency for International Development, and a number of nongovernmental agencies worked together to provide logistics advice and support to the Haitian PROMESS [Program on Essential Medicines and Supply] medical warehouse. With the support and relentless dedication of those military organizations, the PROMESS warehouse was able to develop and improve systems for day-to-day operations, resulting in more expeditious and efficient customer service.

Health Service Support Command and Control

Another first for the ESC as it formed the JLC was assuming command and control of the 56th MMB headquarters and other medical units, such as the Joint Task Force-Bravo Medical Detachment. Never before had the ESC commanded and controlled medical units as part of its mission set. The 56th MMB brought a total of eight medical detachments with numerous key assets into theater. One of these elements was a medical logistics support element.

The headquarters for this element was the 583d Medical Logistics Company (MLC), which included a team of 83 medical supply subject-matter experts who arrived 4 weeks into the operation. The 583d MLC was designated as the theater single integrated medical logistics manager. All medical units operating in theater ordered class VIII items through the 583d MLC using the Defense Medical Logistics Standard Support Customer Assistance Module. The 583d MLC assumed sole responsibility for communicating directly with Kelly USA.

The 583d MLC also provided medical maintenance, oxygen tank refill, and class VIII distribution oversight and management for the entire joint operational area. The involvement of the 583d MLC in the medical supply chain made for a smoother transition from the automated system to the hands of the customer. The unit provided the supplies necessary for uninterrupted healthcare while remaining a good steward of Government funds.

Contract Management Cell

Another nondoctrinal mission the ESC performed in Haiti involved managing contracts across the joint operational area. On 9 February, the JLC assumed contract management oversight responsibility for all JTF-Haiti service and supply contracts. For the first time in the

unit's history, the 3d ESC established a contract management cell (CMC), which served as a conduit between Regional Contracting Command-Haiti and JTF-Haiti.

The CMC was responsible for reviewing requirement packets, preparing unit requests for joint acquisition review board approval, and overseeing contract management once a contract was established. The CMC processed over 89 contracts and obligated over \$2.55 million, with over \$1.65 million going to hostnation businesses.

Deployment/Redeployment Coordination Cell

On 17 February, JTF-Haiti tasked the JLC to establish a deployment/redeployment coordination cell (DRCC) no later than 21 February. The DRCC's mission was to command and control redeployment operations and support, manage, deconflict, and monitor unit redeployment activities. The DRCC's key tasks were to synchronize the movement of redeploying personnel and equipment among unit staging areas, the seaport of embarkation, and the aerial port of embarkation; validate unit movement documentation; and monitor and close unit line numbers.

The DRCC operated under the guidance of the JLC support operations officer and consisted of several personnel from various sections within the JLC. The cell was augmented with redeploying unit liaison officers, personnel from various JLC subordinate units, and a military police company tasked to provide customs support.

On short notice and with limited personnel and resources, the DRCC established capabilities critical to the successful redeployment of units supporting Operation Unified Response. The DRCC mission was a first for the 3d ESC, and when the unit transferred JLC responsibility to the 377th Theater Sustainment Command, the DRCC had processed, staged, and shipped over 500 pieces of equipment and redeployed hundreds of personnel from several battalion-sized or smaller units.

Although it was not doctrinally organized, equipped, or manned to accomplish many of its missions in Haiti, the 3d ESC was able to establish operations and support Operation Unified Response within days of receiving deployment notification. Despite lacking experience in humanitarian assistance and disaster relief operations, the 3d ESC—thanks to Soldier resiliency and adaptive leadership—arrived in Haiti, assumed a mission for which it had not previously trained, and provided much-needed support to joint forces and the Haitian people.

Major Paul R. Hayes is the public affairs officer of the 3d Sustainment Command (Expeditionary) at Fort Knox, Kentucky. The command would like to thank the many individuals who contributed to this article.



45th Sustainment Brigade: Supply Distribution in Afghanistan

BY MAJOR KERRY DENNARD, MAJOR CHRISTINE A. HAFFEY, AND MAJOR RAY FERGUSON

fghanistan is not Iraq. Soldiers deploying to Afghanistan should not try to impose what they learned and experienced in Iraq in Afghanistan. That is a common misconception among most new officers and noncommissioned officers arriving in the theater. Most have not deployed to Afghanistan before and use Iraq as a model for how Afghanistan operations should run. But Afghanistan is very different from Iraq. The terrain and climate in Afghanistan make it one of the most logistically challenging environments in the world. And everything moves much slower in Afghanistan, so everyone deployed there must be patient.

Theater Organization

Until recently, Afghanistan was divided into four regional commands: East, North, South, and West. [Regional Command South-West was carved out of Regional Command South in June.] Currently, a significant number of service members and coalition forces operate in the Combined Joint Operations Area (CJOA).

The CJOA has one sustainment brigade, with the 45th Sustainment Brigade assuming responsibility from the 101st Sustainment Brigade on 7 February 2009 and transferring authority to the 82d Sustainment Brigade on 31 December 2009. The sustainment brigade is an aggregate of different units that include special troops, finance, human resources, rigger, and mortuary affairs collection point units.

Three combat sustainment support battalions (CSSBs) were spread throughout Afghanistan, with each providing area support to its customers. On average, each CSSB has two truck companies and an inland cargo transfer company to provide cargo transfer capabilities at the central receiving and shipping points; reception, staging, and onward integration yards; and airfields.

Task force base support battalions provide direct support to the units within their brigades and any attached coalition forces. The 45th Sustainment Brigade supported hundreds of forward operating bases (FOBs) and combat outposts (COPs) throughout the theater.

Terrain and Weather

The terrain of Afghanistan is a challenge to military operations. Iraq is, for the most part, a flat country compared to Afghanistan. In Afghanistan, Regional

Command East and portions of Regional Command West are mountainous, with elevations reaching 12,000 feet above sea level. Kabul, the capital, is at 5,900 feet and is set in a bowl surrounded by much higher mountains. Many of the FOBs and COPs in Regional Command East are in austere and mountainous locations and cannot be resupplied by ground for many months of the year because of bad weather. Ground movement to these locations is tenuous and slow at best.

The weather and terrain must be considered in all phases of operations, from tactical movements to simple logistics resupply. Winter in Afghanistan adversely affects logistics for at least 5 months, from the beginning of November into March. Many of the smaller locations of U.S. forces depend on containerized delivery system (CDS) and low-cost low-altitude (LCLA) airdrops or slingloads for resupply. Throughout the summer, at least 15 COPs are resupplied by air, and this number more than doubles during the winter as the heavy snows close the mountain passes leading to them.

In the spring, the snow melts and runoff creates the potential for flash floods in valleys and low-lying areas. Floods deposit water and mud on roadways and wash out bridges, leaving COPs isolated from ground resupply.

By contrast, much of Regional Command South and portions of Regional Command West are flat desert and the ground is covered with "moon dust." Dust storms are common, and the heat is intense. The heat in Helmand province in Regional Command South hovers around 90 to 120 degrees for much of the year. This heat adversely affects all logistics, from the airlift capabilities of rotary- and fixed-wing air transport to refrigerated units and generators. The shelf life of water and fuel bags lying uncovered on the desert floor is drastically reduced in summer heat. Personnel suffer through the temperatures while riding in mine-resistant ambush-protected vehicles, working in their tactical operations centers, and sleeping in tents or wooden structures while air-conditioning units struggle to keep them cool.

Ground Movement and Resupply

The road system in Afghanistan is almost nonexistent in comparison to Iraq. Most roads are unimproved and pothole-marked. Many of these roads are not wide enough for two vehicles to pass at a time, and vehicles must travel extremely slowly as they wind through mountainous terrain.

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The priority of trucking is "Afghan First." The 45th Sustainment Brigade used host-nation trucks for 90 percent of its supply movements. The brigade's movement control battalion oversaw an indefinite delivery/indefinite quantity (IDIQ) contract that provides for movement of dry cargo and fuel across the CJOA. The contract currently employs eight host-nation trucking companies and will be revised to include more companies, which will increase responsiveness and competition in supporting U.S. forces.

Under the IDIQ contract, Afghan truckers deliver supplies at a much slower pace than U.S. Soldiers experienced in Iraq. The majority of the IDIQ trucks do not have in-transit visibility, and determining the locations of these trucks is difficult at best.

The local-national truckdrivers also do not work during many Muslim holidays. Ramadan and Eid al-Adha are prime examples of holidays that affect transit times for host-nation trucks. Most truckdrivers did not drive for an average of 6 days during Eid al-Adha in 2009. Planners and support operations officers must consider these movement stoppages during their logistics planning. They should plan accordingly and order trucks and supplies weeks in advance to ensure that they arrive at their final destinations before holiday periods.

Afghanistan is a landlocked country, and supplies and equipment arrive in the CJOA from two separate ground directions. The majority of supplies and equipment arrive at the Port of Karachi, Pakistan, and are then shipped up the Pakistan ground line of communication (GLOC) through two border crossings into Afghanistan. U.S. personnel are not authorized to work at the Port of Karachi or anywhere along the Pakistan GLOC. The enemy threat in Pakistan also affects both the timeline and arrival of supplies. Sensitive items and oversized equipment are not authorized on the GLOC because of security concerns and height restrictions on bridges.

Supplies also are transported through the Northern Distribution Network (NDN). These supplies are

shipped from the countries north of Afghanistan. No military items or equipment are transported on the NDN; the majority of items moved on this route are class IV (construction and barriers materials) containers and fuel.

In Afghanistan, units must properly forecast and order items and supplies in a timely manner. The average time for items to arrive at the Port of Karachi from the United States via ocean movement is approximately 2 months. The supplies then take an additional 21 days to move from the port to the main hubs in the CJOA.

The timely forecasting of supplies and equipment is crucial. If an item is not on hand at a supply support activity, the chances are slim that it will arrive when required unless it is flown into country.

The complex nature of logistics in Afghanistan is extremely challenging because of its landlocked location, mountainous terrain, weather, and the continuous military threat. Our heavy dependence on host-nation trucking requires early forecasting, planning, and patience.

Sustaining Soldiers throughout the CJOA requires an approach that is different from the sustainment methods used in Iraq. This approach must be adaptive and multimodal to solve challenges and keep the warfighters supplied.

Major Benjamin K. "Kerry" Dennard is the support operations officer for the 524th Combat Sustainment Support Battalion. He served as the general supply officer in the Joint Logistics Command during the 45th Sustainment Brigade's deployment to Afghanistan. He holds a B.S. degree in political science from Georgia College and State University and is a graduate of the Quartermaster Officer Basic Course, Combined Logistics Captains Career Course, Combined Arms and Services Staff School, and the Army Command and General Staff College.

MAJOR CHRISTINE A. HAFFEY IS THE SUPPORT OPERATIONS OFFICER FOR THE 45TH SUSTAINMENT BRIGADE. IN AFGHANISTAN, SHE SERVED AS THE DEPUTY SUPPORT OPERATIONS OFFICER IN THE JOINT LOGISTICS COMMAND. SHE HOLDS A B.A. DEGREE IN ELEMENTARY EDUCATION FROM PACIFIC LUTHERAN UNIVERSITY AND A MASTER OF MANAGERIAL LOGISTICS DEGREE FROM NORTH DAKOTA STATE UNIVERSITY. SHE IS A GRADUATE OF THE TRANSPORTATION OFFICER BASIC COURSE, COMBINED LOGISTICS CAPTAINS CAREER COURSE, AND COMBINED ARMS AND SERVICES STAFF SCHOOL.

Major Donald R. "Ray" Ferguson is the brigade operations officer, J-3, of the 45th Sustainment Brigade. He holds a B.B.A. degree in logistics/intermodal transportation from Georgia Southern University and an M.B.A. degree with a concentration in logistics from Touro University. He is a graduate of the Quartermaster Officer Basic Course, Combined Logistics Officers Advanced Course, Combined Logistics Captains Career Course, and Intermediate Level Education.



Echelons-Above-Brigade Convoy Management in Afghanistan

BY MAJOR MICHAEL J. HARRIS AND CAPTAIN ERIC P. ROBY, USMC

ogistics support requirements in Afghanistan grew vastly during the 45th Sustainment
Brigade's 2009 deployment in support of Operation Enduring Freedom. As troop levels increased and contractors arrived by the hundreds, the demand for supplies and services increased exponentially. Although most logistics transportation requirements were, and still are, filled by the Afghanistan hostnation truck (HNT) industry, the need for U.S. Army tactical truck moves became urgent.

As a result, the brigade expanded its tactical convoy operations and, in the process, overcame the challenges posed by austere environments, improvised explosive devices, and impassable roads in inclement weather to meet the logistics needs of the warfighters.

Growing Support of Convoys

When the 45th Sustainment Brigade assumed responsibility for the Joint Logistics Command in Afghanistan from the 101st Sustainment Brigade on 7 February 2009, echelons-above-brigade (EAB) convoy operations were virtually nonexistent. No palletized load system (PLS) companies or other tactical transportation assets were available. Units depended on the HNT industry for all of their ground sustainment.

At the time of the brigades' transfer of authority, convoys were exclusively for escort missions and primarily originated from Kandahar Airfield in support of U.S. and coalition forces across 200 miles of southern Afghanistan. The requirement for more secure convoys was immediately recognized when it became mandatory to escort all HNTs that carried sensitive items. More secure convoys ensured the speed and security of critical class VII (major end items) as they made their way to assigned units.

Over the next 4 months, the 45th Sustainment Brigade received 73 mine-resistant ambush-protected (MRAP) vehicles and 60 PLS trucks as well as the 32d Transportation Company (PLS). The brigade's primary effort was to establish cargo-hauling capabilities to augment the HNT industry and provide secure and reliable transportation for class V (ammunition), high-priority, and sensitive-item shipments.

Throughout the brigade's deployment, the theater continued to mature and logistics convoys expanded across all of Regional Command East, Regional Command South, and Regional Command West. To meet the increasing demand, the brigade grew from 1 combat sustainment support battalion (CSSB), 1 movement control battalion, and 1 special troops battalion (STB) with 11 companies and 7 movement control teams (approximately 1,300 personnel) to 3 CSSBs, 1 STB, and 27 companies and detachments (approximately 3,200 personnel).

Coordinating Operations

To provide command and control of the newly arrived tactical transportation assets, the brigade initially developed an operations position in the J–3 that was responsible for all convoy operational requirements.

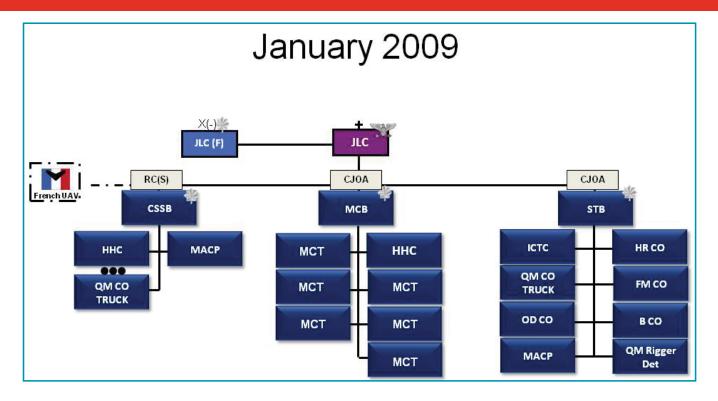
The brigade also stood up a battalion headquarters and made the operations position directly responsible for all battlespace coordination, external support requests, contingency operations plan (CONOP) development, and tracking for Regional Command East. The operations section added a convoy operations noncommissioned officer-in-charge (NCOIC) to assist in performing the increasing duties of managing all EAB convoy operations in Regional Command South.

As the requirements continued to grow in Regional Command South, the brigade stood up a coordination cell in Kandahar that managed and coordinated external support for southern convoys. This cell provided face-to-face interaction with multiple coalition, United Nations, and U.S. forces. It established positive relationships and direct coordination with all coalition and U.S. commands, which made it easier to get support when needed.

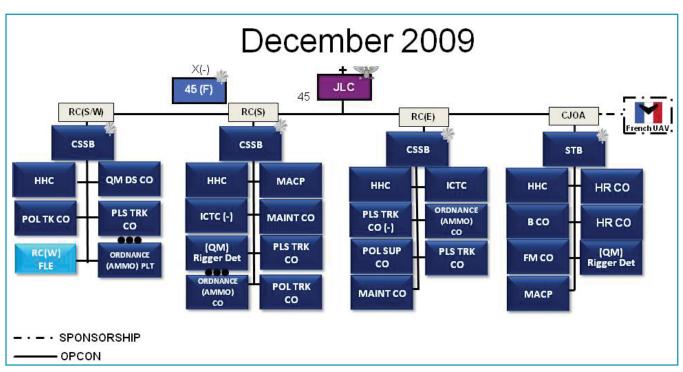
The operations cell included a brigade chief of operations (a captain), a deputy chief of operations (a lieutenant), an operations NCOIC (a sergeant first class), and an assistant operations NCOIC (a staff sergeant). The cell evolved into a full team dedicated to synchronizing efforts among battalions, higher commands, and external support and cross-battlespace coordination, with all duties and responsibilities under the chief of operations.

Convoy Processes

All convoys were planned and managed by the operations cell. A convoy movement tracker was provided by each battalion and the brigade support operations



The year 2009 was one of growth for the 45th Sustainment Brigade. The chart above shows how the brigade looked at the beginning of 2009, and the chart below portrays the array of forces at the end of the year.



LEGEND

AMMO = Ammunition	HHC = Headquarters and	MCT = Movement control	RC(S/W) = Regional Command
CJOA = Combined joint	headquarters company	team	South/West
operations area	HR = Human resources	OPCON = Operational control	RC(W) = Regional Command
CO = Company	ICTC = Inland cargo transfer	PLS = Palletized load system	West
CSSB = Combat sustainment	company	Plt = Platoon	STB = Support troops
support battalion	JLC = Joint Logistics	POL = Petroleum, oils,	battalion
Det = Detachment	Command	and lubricants	SUP = Support
DS = Direct support	MACP = Mortuary affairs	QM = Quartermaster	TRK = Truck
F = Forward	collection point	RC(E) = Regional Command	UAV = Unmanned aerial
FLE = Forward logistics	MAINT = Maintenance	East	vehicle
element	MCB = Movement control	RC(S) = Regional Command	
FM = Financial management	battalion	South	

(SPO) officer; these were compiled into a brigade convoy operational tracker. The external coordination generally started 96 to 72 hours before the execution of each convoy. The operations cell initiated external support requests based on this information while waiting for the finalized CONOP.

With information gathered from the movement trackers, coordination for route clearance packages, rotary-wing (AH–64 Apache and OH–58 Kiowa Warrior helicopter) support, fixed-wing close air support, and intelligence-gathering, surveillance, and reconnaissance resources were conducted with battlespace owners and the 82d Airborne Division and Regional Command South headquarters.

Convoys that traveled through Kabul or Kandahar City required approval and deconfliction with other large convoys and traffic patterns. Requests for convoys to traverse these cities were sent to the 82d Airborne Division's headquarters, the Combined Security Transition Command-Afghanistan, and Regional Command South headquarters for approval and deconfliction.

The plan for the logistics convoy was developed into a CONOP by each battalion and approved by the battalion commander before it was forwarded to the brigade. The 45th Sustainment Brigade operations section reviewed mission details and compared them to information received 72 to 96 hours before executing and finalizing coordination requirements.

The operations section conducted the final coordination steps to ensure that battlespace owners were aware of logistics convoys traveling through their battlespaces. Twenty-four hours before execution of the convoy, the CONOP was forwarded to the battledesks of all battlespace owners along the convoy route.

Additional coordination was needed when convoys crossed regional commands because these convoys were viewed as joint regional command operations and required the regional commander's approval. To obtain this approval, CONOPs were verified and forwarded to regional commands.

During the execution of convoys, the 45th Sustainment Brigade monitored all theater-level sustainment logistics convoys across Afghanistan. As a theater logistics convoy traversed a battlespace, the battlespace owners were responsible for quick reaction forces and explosive ordnance disposal support for the convoy.

Friction Points

The HNTs were in very poor condition and unreliable. They continually missed show times at bases, broke down, or traveled at very low speeds. These problems normally caused logistics convoys to miss external support linkups that were referenced in cross-battlespace coordination plans. The HNTs were needed to promote an Afghan-first methodology and

to alleviate a large portion of the lift-capacity burden, but they caused tremendous strain on external support, which usually was reserved for blocked time. Once the timeline was thrown off, all coordination usually was negated.

A convoy could require up to 16 different requests to execute, including requests for external support from four different battlespace owners and division headquarters, various trip tickets, and required Afghan National Police escorts in some areas. Each battlespace owner's requests varied in format and content. The process doubled or tripled if a convoy was canceled, shifted times, or changed units.

With limited assets and resources across all battlespaces, requesting too many resources and changing them at the last minute caused a loss in coverage and wasted resources. Since the external support (rotarywing aircraft) was dedicated and the mission planning was already completed to support the logistics convoys, the helicopters had to find someone else to support or return to base. This only strained an already stressed asset.

HNTs' maintenance, reliability, and speed were always planning factors when requesting external support. Ensuring that the appropriate planning factors (distance, speed, number of HNTs) were considered when planning a mission was crucial. All requests had to be limited to identified threat areas only. Resources were limited and were only requested when the S-2 indicated an increased need.

As more forces flow into Afghanistan, convoy operations continue to grow and the model will transform to meet the needs of the sustainment brigade and battlespace owners. The key to logistics operations management in Afghanistan is to remain flexible and adapt as logistics capabilities continue to expand to support the warfighter. The HNT industry in Afghanistan will continue to improve as infrastructure is developed and the quality of trucks increases. The 82d Sustainment Brigade, the 43d Sustainment Brigade, and other units to come will capitalize on lessons learned from the initial theater-level logistics operations.

MAJOR MICHAEL J. HARRIS IS ATTENDING THE ARMY COMMAND AND GENERAL STAFF COLLEGE. HE WAS THE S-3 CHIEF OF OPERATIONS FOR THE 45TH SUSTAINMENT BRIGADE WHEN HE COWROTE THIS ARTICLE. HE HOLDS A B.S. DEGREE IN EXERCISE SCIENCE FROM COLUMBUS STATE UNIVERSITY AND AN M.S. DEGREE IN ADMINISTRATION FROM CENTRAL MICHIGAN UNIVERSITY.

CAPTAIN ERIC P. ROBY, USMC, IS THE OPERATIONS OFFICER OF THE MARINE CORPS DETACHMENT AT FORT LEE, VIRGINIA. HE WAS THE DEPUTY CHIEF OF OPERATIONS FOR THE 45TH SUSTAINMENT BRIGADE WHEN HE COWROTE THIS ARTICLE. HE HOLDS A B.S. DEGREE IN TRANSPORTATION AND LOGISTICS FROM THE OHIO STATE UNIVERSITY.

45th Sustainment Brigade:

Aerial Delivery in Afghanistan

BY CHIEF WARRANT OFFICER 2 MICHELLE G. CHARGE

rom February 2009 through the end of that year, the 45th Sustainment Brigade was responsible for managing all of the aerial drops in Afghanistan and sustaining more than 68,000 Soldiers (equivalent to 19 brigades) with equipment and supplies. During this time, more than 16 million pounds of supplies were dropped to keep the war-fighter sustained and to maintain momentum on the battlefield. This article discusses the complexities of preparing and executing those airdrops.

Most of the supplies were dropped from the airdrop aircraft of choice, the C-17 Globemaster III transport. The C-17's capabilities meet the needs of Operation Enduring Freedom in Afghanistan. Successful airdrop missions take days of planning, rigging, and communicating to ensure 100-percent success. A combination of Army, Marine Corps, and Air Force units, commodity managers, riggers, and airfield personnel conducted aerial deliveries on a regular schedule.

Receiving units must keep an inventory of their days of supply and anticipate when they will need to be resupplied. The overall resupply process may take days or weeks, depending on the commodity and the amount of it that needs to be dropped. Once a requirement is validated by the unit, a logistics air movement request is sent through the supporting brigade support battalion to the 45th Sustainment Brigade support

operations (SPO) office for processing. Once the request is opened, a host of people are involved in the execution of the requested resupply.

Army and Marine Corps airdrop planners schedule the loads for delivery while Air Force crews contend with terrain, time hacks, and an exhaustive schedule as they execute daily airdrops. ["Time hacks" are when all parties involved in an operation set a standard time that everyone will follow.] The riggers keep pace with the never-ending demand for supplies that have to be bundled and rigged for each drop while the airfield personnel coordinate actions as each plane is loaded. Riggers translate the requirements into bundle counts, the mobility control team assigns a mission number or ITARS (intertheater airlift request system) number for each airlift, and the air mobility division allocates each aircraft for a specific airdrop mission.

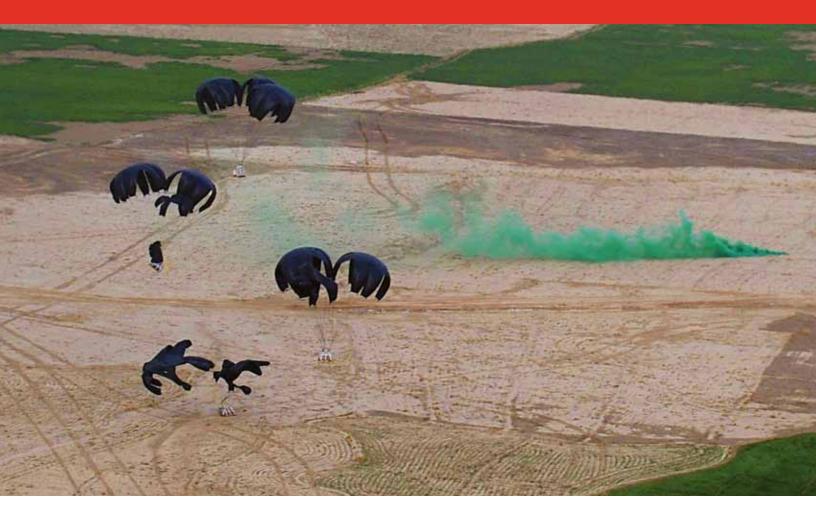
Drop day is busy for the receiving ground unit because it must gather a recovery team, establish communications with the aircraft, and secure the drop zone. Ground recovery units must also contend with mountainous terrain, mud, snow, and the enemy as they collect the drops, which may take days or hours depending on their situation on the ground. Nothing is easy in Afghanistan. Challenges are so complex that different parachute systems are tested to find the opti-

mal solution. An example of getting the right parachute for the mission was the resupply of a high-altitude

The site was nestled between 7,000-foot-high mountains and had a very small patch of land for receiving airdrops, so resupplying it on a weekly basis



Container delivery system bundles airdropped from an Air Force C-17 Globemaster III descend to the drop zone in Afghanistan. The C-17 was the aircraft of choice for aerial resupply. (Photo by SSgt Angelita Lawrence, USAF)



Low-cost-low-altitude resupply bundles land inside the drop zone during an aerial resupply mission in Afghanistan. The 45th Sustainment Brigade contracted for CASA C-212 airplanes to deliver these smaller bundles to remote forward operating bases, convoys, and patrols. (Photo by SSgt Angelita Lawrence, USAF)

was difficult. The logical choice for a parachute should have been the Global Positioning System-guided Joint Precision Aerial Delivery System (JPADS), which can ensure the accuracy of each drop.

JPADS was designed to be precise on landing and should easily land at the site's drop zone, but the close proximity of the surrounding mountains interfered with its ability to maneuver the parachute to its intended destination. The conventional high-velocity parachute system proved to be the better and more successful choice for resupplying the site. This situation illustrates how terrain plays a key role in determining which parachute to use in Afghanistan.

To improve JPADS for use in Afghanistan, a Joint Urgent Operational Needs Statement has been submitted to request software upgrades that will better negotiate complex contours and improve airdrops by reducing delivery errors to within 25 meters of their targets. In the future, JPADS may be the parachute of choice for mountainous terrain with small drop zones. But for now, the conventional high-velocity parachute systems are accomplishing the mission.

In an exhaustive effort to reach the warfighters no matter where they are in Afghanistan, the 45th

Sustainment Brigade also contracted for CASA C-212 airplanes to deliver the smaller low-cost, low-altitude resupply bundles to remote FOBs, convoys, and even patrols on the move. Done with laser-precision accuracy, supplies are dropped from varying altitudes. These aircraft have the ability to deliver 2,200 pounds of supplies to locations where larger aircraft are unable to go. These contracted aircraft were critical to sustaining the small units in Afghanistan.

With the 45th Sustainment Brigade redeployed to its home duty station at Schofield Barracks, Hawaii, it can look back knowing that it air-serviced its coalition forces to the best of its ability. The brigade provided them with what they needed in order to preserve momentum on the battlefield and to serve and protect the Afghan people. Aerial delivery remains a huge capability in supporting the warfighter in Afghanistan.

CHIEF WARRANT OFFICER 2 MICHELLE G. CHARGE WAS THE SUPPORT OPERATIONS AERIAL DELIVERY OPERATIONS OFFICER FOR THE 45TH SUSTAINMENT BRIGADE AT BAGRAM AIRFIELD, AFGHANISTAN. SHE IS PURSUING A B.S. DEGREE IN SOCIAL SCIENCE.

Convoy Support Teams

BY LIEUTENANT COLONEL STEVEN L. UPDIKE, USAR

he hard work of U.S. Army Central Command logisticians on the battlefield is often unnoticed because their efforts are considered simply routine, everyday activities for logistics personnel. But those logisticians are the linchpin of the responsible drawdown in Iraq and the buildup in Afghanistan.

Supporting Logistics Convoys

One simple but innovative technique that logisticians employ to achieve success on the battlefield is the convoy support team (CST). Personnel assigned to the sustainment brigade in Kuwait and its subordinate transportation battalions do not see the CST as difficult or remarkable because this technique has existed for many deployment cycles. But some forward-thinking logistician in the sustainment community had a reason for rethinking Army procedures and developing this mechanism to accomplish the mission.

The sustainment brigade in Kuwait executes a composite technique to accomplish the sustainment mission. The technique involves CSTs and logistics convoys. The CSTs are located at outlying forward operating bases (FOBs) and have the primary purpose of assisting logistics convoys in making the round trip to withdraw equipment and cargo from Iraq. CSTs are detachments that consist of about three to five personnel who coordinate maintenance of broken-down vehicles and life support, including overnight lodging and FOB transportation (such as between lodging and dining facilities), for the convoy members.

Maintenance Support

The biggest challenge—and certainly a major success—for the CST is maintenance support. CSTs at the FOBs have bench stock class IX (repair parts) for mechanics to use for preplanned or forecasted repairs (based on historical data), but these CSTs do not have any assigned mechanics. The unit mechanics are located in Kuwait because the number of mechanics is limited and most of them are thoroughly occupied with unit organizational maintenance operations.

The CSTs are provided with bench stock at each FOB because they do not have unit identification codes or Department of Defense activity address codes. The CSTs also do not have a prescribed load list (PLL) to ensure that their parts are delivered, so they must coordinate with the sustainment brigade's command and control elements to synchronize delivery of parts.

The battalion maintenance officer (BMO) provides one mechanic to ride in each logistics convoy in case of any unforeseen breakdowns. Up to 35 convoys may be traveling on the main supply route at any given time, limiting the number of mechanics available to maintain the unit's vehicles at the FOB.

The CSTs support the BMO by providing forward support and have oversight at the FOB to coordinate for other mechanics to perform the actual repairs. The CSTs coordinate with the FOB mayor's cell for life support and the directorate of logistics for maintenance support but use the FOB's assets to accomplish the maintenance tasks without tasking mechanics unnecessarily to support the convoys.

An extensive spreadsheet is maintained for managing class IX and includes the parts for both truck battalions in the brigade. The repair parts are taken from the sustainment brigade's PLL and sent to Iraq with the convoys on a routine timeline. Parts for all vehicles are maintained as bench stock at all CST locations and are tracked by the brigade with guidance from the two BMOs in Kuwait.

The CST concept is unique and can be executed without reorganizing a unit's table of organization and equipment. Many units should consider this option in future logistics planning, especially in remote locations such as areas in Afghanistan. This type of forward thinking and execution is exactly the type of lessons learned that we need to pass on to our military leaders for use in future conflicts.

Just as airline passengers may take for granted the hard work that airline personnel put into transporting passengers seamlessly from place to place, an Army logistician's complex operation of moving supplies may go unnoticed. It may seem simple and routine to employ the CST, but this technique has saved the Army money, lives, and resources.

LIEUTENANT COLONEL STEVEN L. UPDIKE, USAR, IS ASSIGNED TO THE CENTER FOR ARMY LESSONS LEARNED AS A THEATER OBSERVATION DETACHMENT OFFICER AT THE 1ST THEATER SUPPORT COMMAND IN KUWAIT. HE IS A GRADUATE OF THE NAVAL COMMAND AND STAFF COLLEGE, AIR COMMAND AND STAFF COLLEGE, ARMY COMMAND AND GENERAL STAFF COLLEGE, DEFENSE STRATEGY COURSE, AND ASSOCIATE LOGISTICS EXECUTIVE DEVELOPMENT COURSE. HE HAS A BACHELOR OF SCIENCE DEGREE IN ECONOMICS FROM THE UNIVERSITY OF MISSOURI-ROLLA AND A MASTERS OF ARTS HONORS DEGREE IN TRANSPORTATION AND LOGISTICS MANAGEMENT FROM THE AMERICAN MILITARY UNIVERSITY.

AFSBs and RDECOM: Strengthening the Materiel Enterprise

BY MAJOR O'NEAL A. WILLIAMS, JR.

Army field support brigades work with the Research, Development and Engineering Command and other partners in theater to meet Soldiers' materiel requirements.

he 402d Army Field Support Brigade's (AFSB's) Acquisition, Logistics, and Technology Directorate (ALT–D) has the unique mission of integrating and synchronizing acquisition and technology support with accountability and sustainment in support of the Materiel Enterprise in the brigade's area of responsibility (Iraq, Kuwait, and Qatar). Now that the theater is downsizing, ALT–D's mission has expanded to include synchronizing accountability of technology insertion during retrograde operations to prevent loss or destruction of equipment.

In order to accomplish its mission, ALT–D has built strong partnerships with in-theater program managers (PMs), the Research, Development and Engineering Command (RDECOM) senior command representative (SCR), and the other life-cycle management command (LCMC) representatives in the brigade. These partnerships strengthen the Materiel Enterprise and create synergy among the LCMCs, RDECOM, and the 402d AFSB.

Working With the SCR

Within the AFSB, the personnel in ALT-D work closely with the RDECOM SCR. The SCR (who resides in the brigade headquarters) is responsible for coordinating with all RDECOM agencies, laboratories, and centers and for collecting data on vehicles within the theater for his parent agency, the Army Materiel Systems Analysis Activity.

The 402d AFSB's science adviser complements the SCR's efforts by applying his expertise; the science adviser does this through direct coordination with supported units on various technological challenges throughout the theater. The science adviser and the SCR work together to gather Soldiers' requirements and resolve many unforeseen problems with the new technologies that support the warfighters.

One example of how the SCR and the science adviser collaborated was when they assisted an engineer company (Stryker) deployed from Fort Lewis, Washington, in developing a lighting kit that provided better visibility during night-time route clearance missions. Once this capability gap was identified, the SCR and the science adviser worked quickly to meet the Soldiers' requirement. In conjunction with developing a design, they also submitted a request for information to both RDECOM headquarters and PM Stryker to assist in developing an Army-funded lighting system.

The science adviser and the SCR used the capabilities of the welding shop of the 1st Battalion, 402d AFSB. The two men provided the welding team with diagrams and templates to build the new Stryker lighting bracket set. These lighting brackets were designed to support an existing lighting system used by the engineer company. The engineers are using these brackets on a limited basis until PM Stryker develops a lighting kit that addresses the unit's requirements.

During a subsequent video teleconference (VTC) with RDECOM headquarters, the science adviser informed the participants that the lighting brackets had been created and distributed to the engineer company in Iraq. Since the 402d AFSB had already developed the lighting bracket prototypes for Stryker vehicles with and without slat armor, the Task Force Paladin liaison officer, who was a participant in the VTC, requested that the AFSB help to develop a better Stryker lighting system for units supporting Operation Enduring Freedom.

The following day, the RDECOM SCR emailed the engineering drawings and shipped prototype brackets directly to the 401st AFSB in Afghanistan for fabrication and distribution to Task Force Paladin. Currently, RDECOM is prepared to produce more lighting brackets to support the demand from both theaters.

Coordinating With the STAT

The lighting kit illustrates the partnership between the AFSB and RDECOM. This partnership is further enhanced through the support provided to RDECOM's Science and Technology Assistance Team (STAT).

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The 402d AFSB has an agreement with RDECOM to support the STAT with life support (such as housing, use of vehicles, accountability, computers, and phones) and office space. Not only does the AFSB support the STAT administratively, it also supports the team in its mission to assist the warfighters in articulating their requirements to Department of the Army headquarters, RDECOM's laboratories and centers, and the Assistant Secretary of the Army for Acquisition, Logistics, and Technology (ASA [ALT]) community.

The AFSB assists the STAT's operational efforts through the brigade's science adviser. Along with the Science and Technology Acquisition Corps adviser (STACA), the AFSB and the science adviser canvas the entire Iraqi theater to address Soldiers' requests for information, challenges, and improvements at the company, brigade, and division levels. This group of highly trained individuals also fields questions and accepts challenges from other services, delivering solutions to the warfighters quickly and across all phases of an operation.

Partnering for Theater Support

How is it possible for a science coterie to address technology issues across an entire theater? The answer is not as complicated as one might think. The AFSB science adviser, the STACA, the corps science adviser, and the STAT cover specific areas on the battlefield, and each has specific responsibilities. On special occasions, each officer has the ability to cover another officer's area of responsibility.

To assist in this overall effort, the AFSB science adviser is responsible for gathering requirements through logistics support elements and brigade logistics support teams. Working with these elements allows the science adviser to gather requirements from all combat units on the battlefield through sustainment and maintenance channels.

The STAT is embedded in the division headquarters, which gives it direct access to divisional units. However, its reach goes farther than just the division; the STAT has a medical adviser who can gather requirements from all medical facilities in the theater.

The corps science adviser and the STACA work closely together to field requirements and direct those requirements through corps leaders for approval and execution with command emphasis. Although they both reside in the corps headquarters, they have differing roles.

Since the corps science adviser (who typically resides in the C-3/J-3 Force Management Directorate) can interface directly with the corps commander and corps staff sections, he has the backing to influence the efforts of external supporting agencies, such as the Rapid Equipping Force, the Army Test and Evaluation Command, and science and technology agencies (RDECOM headquarters and research and development centers). The corps science adviser is also the focal point for all divisional requirements. (The STAT has access to only one division.) With all these moving pieces, an element that can unify all these efforts is needed.

The STACA is that unifying agent, providing synergy to all science and technology efforts in the theater. Since he resides on the corps staff, the STACA uses his position to organize requirements from the STAT, the corps science adviser, and the AFSB science adviser. This allows for synchronization of effort and reduces redundancy in submitting operational need statements, formal requests for information, and other requirements documents.

The coordination, level of commitment to Soldiers, and consistent dialog among key RDECOM agencies and organizations, the STAT, the STACA, science advisers, PMs, AFSBs, and the ASA (ALT) demonstrate how the Materiel Enterprise supports the warfighters in the field. From the AFSBs to RDECOM to the PMs, these entities have forged an alliance that converts Soldiers' requirements into materiel solutions, thus increasing their survivability, lethality, and mobility on the battlefield.

MAJOR O'NEAL A. WILLIAMS, JR., IS THE BRIGADE SCIENCE ADVISER OF THE 402D ARMY FIELD SUPPORT BRIGADE. HE HOLDS A B.S. DEGREE IN ELECTRICAL ENGINEERING FROM HOWARD UNIVERSITY AND A LEVEL-2 CERTIFICATION IN SYSTEMS PLANNING, RESEARCH, DEVELOPMENT, AND ENGINEERING AND IS A LEAN SIX SIGMA GREEN BELT.

New Equipment Fielding: What Can an AFSB Do for Me?

BY MAJOR CAMILLA A. WOOD

n today's battlefield, having a single interface for sustainment logistics operations between the field and the materiel developer is of immeasurable value. This interface not only provides a standalone logistics capability that supports the warfighter, but it also puts into effect a materiel enterprise concept that integrates acquisition, logistics, and technology to protect, equip, and sustain joint and coalition forces in support of the theater of operations.

In the Iraqi theater, the 402d Army Field Support Brigade (AFSB) is that interface. Using an internal asset known as the Acquisition, Logistics and Technology Directorate (ALT-D), the AFSB can coordinate between the warfighter and the materiel developer to facilitate all fielding tasks and coordinate with external entities. The ALT-D has several focus areas, but one of its primary areas of responsibility is to support the integration, accountability, and sustainment of newly fielded equipment within the area of operations.

The directorate's efforts have many moving pieces, including planning and coordinating for life support, facilities, and communications; shipping and receiving equipment; personnel support; and sustainment planning. ALT–D's ability to orchestrate these actions not only provides a substantial benefit to U.S. Forces-Iraq but also provides program executive officers (PEOs) and program managers (PMs) a "no cost" initial entry point for coordinating essential fielding.

Coordinating Fieldings

All fieldings within theater begin and end with the U.S. Forces-Iraq J-3 Force Modernization Division, which directly coordinates with U.S. divisions to ensure appropriate synchronization in support of the warfighter's mission. Fielding coordination is initiated with a notification of intent issued by the PM to the Iraqi theater. This action triggers subsequent planning meetings that include U.S. Forces-Iraq, the Assistant Secretary of the Army for Acquisition, Logistics, and Technology liaison officer, and the AFSB ALT-D.

Once planning begins, several key tasks and common issues tend to arise. (See chart at right.) By using the AFSB, the PEO and PM can support the overall intent—to meet the warfighting commanders' requirements—while filling resource gaps through the receipt and retention of essential assets.

Pre-Execution Documentation

Essential pre-execution documentation is needed to support a successful fielding. This documentation includes the following:

- ☐ A technology development plan, which is provided by the PM to ensure that essential fielding information is available.
- ☐ A memorandum of notification, in which the specific fielding requirements are outlined.
- □ A distribution plan, which provides a picture and description of the system being fielded, a summary of the fielding plan (including sustainment requirements), and the prioritized unit and division distribution.

Once this information has been provided, a fielding schedule is determined and coordinated among the various U.S. divisions.

Accountability

Accountability of theater-provided equipment (TPE) is managed by the theater property book office (TPBO). The TPBO cell is colocated with the 402d AFSB's 2d Battalion and includes a chief warrant officer as the accountable officer, a Government civilian employee appointed as the deputy accountable officer, and contracted Property Book Unit Supply Enhanced (PBUSE) technicians. Currently, 13 theater property book (TPB) teams are located

New Equipment Fielding Key Tasks

- □ Identify new fielding efforts (from Joint Improvised Explosive Device Defeat Organization, Rapid Equipping Force, program managers and program executive officers).
- Assess adequacy of sustainment plans.
- Identify and plan support requirements for—
 - Accountability (theater-provided equipment).
 - Facilities.
 - Equipment.
 - Life support.
 - Contracted logistics support management.
 - Transportation.
 - Range support.
- ☐ Develop concept of support plans.
- Develop and publish fielding and sustainment orders (fragmentary orders).

throughout the Iraqi theater to support units with TPE property accountability.

All TPE must be documented on the TPB, and PMs are required to establish a hand-receipt account within PBUSE. Before equipment is brought into the theater, it is imperative that PMs populate equipment to be fielded into PBUSE using derivative unit identification codes. The TPBO is a tremendous asset and can provide a list of unit TPB accounts; a sample Department of the Army Form 3161, Request for Issue or Turn-In; and a point of contact list for all TPBOs in country.

The relationship between the warfighter and AFSB provides PEOs and PMs with timely and manageable accountability of fielded equipment, thus supporting their ability to meet schedule and cost requirements flawlessly.

Execution Support

The availability of support during the fielding process is a top priority for many PM offices. The questions most PMs want to have answered concern the life support and resources available to support the needs of their theater representatives. AFSB personnel understand that resources often can be the determining force in the success or failure of a particular fielding, so the AFSB is postured to provide coordinated support to a variety of areas.

Life support. How will PEO and PM personnel be supported? The AFSB staff is available to coordinate for life support and housing on forward operating bases (FOBs) that have a permanent AFSB footprint. Existing housing is provided, as space is available, for short-duration projects with small numbers of people. For large or long-term projects where requirements exceed available space, the AFSB can coordinate for housing in support of the PEO and PM.

Once large or long-term project coordination is completed, the project sponsor (the PEO or PM), based on theater fiscal policies, may be responsible for providing funding to purchase the housing units identified. These housing units will be managed by the AFSB and will be available for reallocation or reassignment following completion of the project.

On FOBs where the AFSB does not have a permanent footprint, the brigade has established logistics support elements (LSEs) and brigade logistics support teams (BLSTs), which are responsible for coordinating life support with the tenant operational unit or mayor's cell.

Facilities. Where will PEO and PM personnel work? The AFSB also coordinates facilities for installation fielding missions throughout the theater. The brigade uses existing facilities to meet mission requirements to the maximum extent possible at no cost to the project sponsor (the PEO or PM). The AFSB is capable of

coordinating land acquisition and facility construction if existing facilities are not available or do not meet mission requirements. Based on theater fiscal policies, the project sponsor (the PEO or PM) may be responsible for providing funding.

Special equipment. If the PEO or PM has special equipment requirements, how will they be supported? The AFSB can obtain special equipment, such as forklifts and overhead lifts, for fielding missions throughout the theater. The brigade recognizes that the PEO or PM is responsible for ensuring that its personnel are trained and licensed to operate any special equipment required to complete the mission.

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The AFSB uses existing equipment to meet mission requirements to the maximum extent possible at no cost to the project sponsor (the PEO or PM). If existing equipment is not available or does not meet mission requirements, the AFSB will coordinate for the acquisition of the special equipment at a cost to the project sponsor. The brigade is postured to manage all special equipment and can ensure its reallocation or reassignment following the project's completion.

Communication support. How will the PEO or PM communicate with its personnel once they begin fielding to the warfighter? Communication support is available with proper coordination on FOBs where the AFSB has a permanent footprint. The brigade has a number of phones and computers that can be used on a short-term basis by project personnel when resources are available.

Individuals choosing to use the Army Materiel Command (AMC) network must have at least a favorable national agency check on file in order to obtain a NIPRNET (Non-Secure Internet Protocol Router Network) account and a secret clearance if a SIPRNET (Secure Internet Protocol Router Network) account is required. PEO and PM personnel may choose to bring their own computers (desktop or laptop), but they must

understand that configuration control will remain with the AFSB.

Equipment shipping and receiving. Who does the PEO or PM coordinate with to ensure equipment is received as it comes into the theater? Equipment shipping and receiving is an important part of the entire fielding process. As equipment is processed into the theater, it is imperative that it is tracked down to the lowest level of command. Transportation control numbers and radio frequency identification tags allow the AFSB to track and identify the location of equipment as it is being processed into the theater.

AFSB personnel can coordinate shipping, receiving, and temporary storage of equipment that is used for fielding, equipment upgrade, or sustainment operations within the theater. This support is easily managed at

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locations where the AFSB has a permanent footprint. For those locations where an AFSB footprint is not established, the brigade is prepared to coordinate necessary logistics support.

Personnel transportation. What type of transportation support is available as personnel travel throughout the theater in support of an upcoming fielding? Personnel supporting an AMC mission (fielding, training, sustainment, or liaison visits) can contact the AMC liaison desk upon arrival at Ali Al Salem Air Base in Kuwait to coordinate transportation into the theater.

In the 402d AFSB, two emergency operations centers in Iraq (one located in Baghdad at Victory Base Complex and one at Joint Base Balad) can provide movement assistance. The administrative support personnel within the LSEs and BLSTs also can assist in arranging transportation to the various FOB locations once personnel are in the theater.

New Equipment Training

Before equipment is officially signed over to a unit, new equipment training (NET) must be conducted in conjunction with the materiel fielding. NET is the responsibility of the appropriate PEO or PM and facilitates the transfer of knowledge about equipment use and support requirements from the materiel developer to the users, trainers, and maintainers of the new equipment.

The PEO and PM NET teams can coordinate with the AFSB to arrange NET support to the gaining units for both operation and maintenance training. NET teams are attached to the AFSB, effective when they arrive at the airport or seaport of debarkation, for personnel accountability, tactical logistics (including movement), life support, and integration into the local force protection or security plan.

Transition to Sustainment

Sustainment support should be an integral part of any fielding process. With the AFSB's assistance, PEOs and PMs can use existing maintenance and sustainment contract vehicles when planning for long-term sustainment. In many instances, limited depotlevel repair capabilities exist at several of the forward repair activities. It can be very beneficial to plan for limited depot-level sustainment in the theater rather than having to transport all items requiring depot-level repair back to the continental United States.

The AFSB can assist in coordinating long-term sustainment support with the life-cycle management commands. It can also aid in developing a sustainment plan that is responsive to warfighter needs based on the unique operational constraints that exist in the theater. The AFSB also provides personnel who function as contracting officer's representatives to provide incountry operational oversight of sustainment contracts and field service representatives.

The AFSB provides many support capabilities to PEOs and PMs. The extensive process needed to field an individual piece of equipment requires a systematic approach that includes everything from accountability and fielding coordination to sustainment requirements. This type of knowledge and expertise provides PEOs and PMs, the warfighter, and U.S. Forces-Iraq a combined "one-stop shop" for finding subject-matter experts and fielding points of contact who can answers the who, what, when, where, and how questions that inevitably arise during new equipment fielding.

Major Camilla A. Wood is the assistant director of acquisition, logistics, and technology in the 402d Army Field Support Brigade. She is level-3 certified in program management and previously served as assistant program manager for the Patriot Advanced Capability-3 Program Office and Non-Line of Sight Launch System Project Office. She holds a B.A. degree from South Carolina State University and an M.S. degree in administration from Central Michigan University.



The Capabilities of the Army Field Support Brigade's Acquisition, Logistics, and Technology Directorate

BY LIEUTENANT COLONEL STEVEN G. VAN RIPER

f your unit is preparing to deploy, has deployed, or is in any other phase of the Army Force Generation process, terms like ONS, JUONS, REF, FOA, OPNET, and FLMNET have become a part of your daily vernacular. What can you do to understand this strange collection of acronyms? What about the inevitable fielding, sustainment, and support strategy requirements? Is there someone or some organization to help you complete the tasks associated with coordinating and synchronizing these efforts?

An Army field support brigade (AFSB) can help. Seven AFSBs operate in the continental United States (CONUS) and outside CONUS. Two of the AFSBs are forward deployed to Southwest Asia, one in support of Operation Iraqi Freedom and the other in support of Operation Enduring Freedom. The AFSBs are assigned to the Army Sustainment Command and perform a critical role as the Army Materiel Command's face to the field. They round out the Materiel Enterprise at the operational level, providing tactical commanders with logistics and sustainment support not typically provided by sustainment brigades or expeditionary sustainment commands.

Each AFSB modification table of organization and equipment includes positions for one area of concentration (AOC) 51Z (acquisitions) acquisition officer (O-5), one AOC 51A (systems development) acquisition officer (O-4), and one AOC 51S (research and engineering) science and technology officer (O-4). These three officers form the core of what is usually called the acquisition, logistics, and technology directorate (ALT-D).

This directorate's mission and core competencies vary from AFSB to AFSB depending on the operating environment, supported units, and command focus. But they always include integrating and synchronizing with the Assistant Secretary of the Army for Acquisition, Logistics, and Technology (ASA [ALT]), program executive officers (PEOs) and program managers (PMs), and the warfighter to ensure that fielding, operational assessments, and other acquisition-centric activities are successful within supported units. The officers and staff in the ALT—D can provide direct support and staff coordination for your unit's acquisition, logistics, and technology efforts.

Operational Needs Statements

Ideally, your unit will have all the equipment it needs to accomplish its assigned mission; the mission-essential equipment list (MEEL) will be 100-percent sourced, and you will be able to efficiently and effectively cover your battlespace. Unfortunately, this is the exception rather than the rule. Constantly changing operational environments and evolving mission sets render even the best MEELs inadequate in some critical areas. These inadequacies can cause capability gaps that can adversely affect a unit's ability to accomplish the mission.

The first consideration when trying to overcome a gap should be reallocation of equipment within your command or the next higher command to make up for any shortages. If this is not a viable option, an operational needs statement (ONS) or joint urgent operational needs statement (JUONS) (the latter if you are in a joint battlespace) is the next step in attempting to mitigate the capability gap.

Each command has slightly different processes for compiling, staffing, and forwarding an ONS or JUONS. Your AFSB (whether inside or outside CONUS) can assist in determining if another ONS or JUONS already exists that describes your capability gap, if technology exists that can satisfy your requirements, and if your ONS or JUONS contains the critical elements for acceptance. ONS and JUONS efforts are usually assigned to the science and technology officer in the AFSB.

Submitting a technically correct ONS or JUONS is a critical step and will eliminate stop-and-go staff delays that could prevent your unit from receiving needed equipment. Although every effort will be made to satisfy an ONS or JUONS as quickly as possible, it can sometimes take weeks to receive equipment that satisfies your requirement. If your need is urgent, consider using the Rapid Equipping Force (REF).

Rapid Equipping Force

An alternative to the ONS or JUONS is the REF and its 10 Liner requirements document. Don't confuse the REF with RFI, the Rapid Fielding Initiative. The REF is an organization chartered to conduct

pinpoint fieldings of critical equipment to deploying or deployed units. The 10-Liner is a document used by the REF to capture a very specific requirement from deploying or deployed units. The science and technology officer can review the 10-Liner and communicate with the REF.

After receiving the 10-Liner, the REF will attempt to satisfy your requirements by using commercial off-the-shelf (COTS) or modified-COTS systems or equipment. The REF can potentially meet the requirement in a much shorter time than the "normal" acquisition process.

Equipment provided by the REF is not free, so you should expect the gear to show up on your property book. The REF will usually issue equipment to brigade-sized or smaller units; in some cases, it will issue items in greater quantities. The REF may request your participation in a forward operational assessment (FOA) to record your comments, as an end user, on the equipment's effectiveness. In order to assist your unit during a REF fielding and FOA, the ALT-D can continue to liaise with the REF team and can act as a collection point for FOA questionnaires.

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In some cases, a REF-fielded item can be transitioned into what is called a "program of record." This can happen when the FOA is exceptionally favorable or when demand becomes so large that REF management and funding becomes inadequate. When this occurs, the program is assigned to a PM, provided a funding line, and subjected to the administrative requirements of the formal acquisition process. If a REF initiative achieves program of record status, the ALT—D can complement PM activities by synchronizing the fielding plan with operational commitments and schedules.

Fielding Plan

From the gaining unit's perspective, the fielding plan is probably the most important component of the

acquisition process. The gaining unit is really not interested in the challenges the PM faces with contracting, designing, producing, and delivering the new system. What the unit does care about is when it will be receiving the equipment and how many it will receive.

Depending on processes used by your higher headquarters and your assigned AFSB, the fielding plan may be a stand-alone document or distributed as an operation order (OPORD) or fragmentary order (FRAGO). In either case, the ALT-D can provide vital input through normal staffing or through immediate communication to ensure that unit fielding expectations and requirements are synchronized with the system's production rate, delivery schedule, and distribution plan.

The ALT-D will coordinate with appropriate higher headquarters staff sections and the PM to ensure that essential elements of the fielding plan (schedules, issue locations, gaining unit responsibilities, and transportation requirements) are included in the instructions provided to the receiving unit.

Fieldings seldom involve single-point distribution from a fully equipped warehouse or deprocessing site. They typically include several geographically dispersed fielding sites, differing levels of infrastructure, and varying quantities for issue. The ALT-D and the PM can manage these fielding nuances and greatly simplify the process for the gaining unit.

The ALT-D also can assist with asset visibility and property accountability, ensuring that PMs comply with all Property Book Unit Supply Enhanced requirements for equipment issue and transfer. The ALT-D can coordinate to ensure that field service representatives (FSRs) are present to assist in acceptance inspections and final issue of the equipment.

The execution of the fielding plan sets the conditions for all follow-on activities associated with a new system. Using the ALT-D's capabilities will ensure that the fielding plan is synchronized with your unit's expectations and requirements. Second, if not equally important in terms of unit priorities, is new equipment training (NET).

New Equipment Training

It seems obvious that NET, specifically operator new equipment training (OPNET) or field-level maintenance new equipment training (FLMNET), would be required as a unit receives new equipment, but some units do not synchronize NET with their daily tasks and battle rhythm. NET is an essential part of fielding and must be done right the first time. Without NET, new equipment can easily become paperweights, motor pool queens, or just labeled "too hard to use" by Soldiers.

The ALT-D can ensure the NET is both efficient and effective by forwarding unit expectations, time available, and other unit-unique training requirements

directly to the PM. The section can also provide the PM with unit training schedules or timelines that may require changes to NET times and locations.

THE ALT-D CAN
ACT AS THE CONDUIT
BETWEEN YOU AND
THE PMO TO ENSURE
THAT ANY SUGGESTIONS
FOR IMPROVEMENTS ARE
PROPERLY PREPARED
AND PRESENTED.

The ALT-D can verify that the NET plan is included in any OPORD or FRAGO that prescribes fielding and will facilitate unique NET requirements, like warehouse storage space, classroom coordination, housing, and instructor accountability. When conducting NET in a deployed environment, the ALT-D can track an instructor's country clearance and call forward requests and arrange for housing and intertheater and intratheater transportation.

Challenges inevitably emerge during even the best planned NET events. The ALT-D can "run interference" with the PM to mitigate any problems that may arise. This unburdens the unit accepting the fielding and allows it to stay focused on the many ongoing predeployment training activities that are no doubt occurring at the same time as the NET. Problems can be as trivial as not having enough handouts or as serious as realizing the wrong software version is loaded into a new communications system.

In rare cases, communication between the ALT-D and the PM is not effective. If this occurs, the AFSB commander can engage senior leaders in the Material Enterprise for direct assistance. In any event, the ALT-D will be the single face to your unit for NET and other training activities. After a successful initial fielding and NET, the ALT-D will begin working with your unit and PM to ensure an effective support strategy is implemented.

Support Strategy

If the program management office (PMO) has done its homework, your new gear should either be fully supported by field-level maintenance and the Army supply system, come with FSRs as part of a contractor logistics support (CLS) program, or feature a combination of Army maintenance and FSRs and CLS.

If FSRs and CLS are involved, the AFSB can provide a great deal of assistance with tracking, managing,

and general support of the FSRs and their unique tool and facility requirements. Since the ALT-D can interface directly with your staff officers and the end-user Soldiers, the support strategy will be tailored to your specific needs and operational environment. This interaction allows the AFSB to work with the PMO as the support strategy changes over time.

As your unit uses the new equipment more, usability, reliability, and maintainability issues undoubtedly will emerge. The ALT–D can act as the conduit between you and the PMO to ensure that any suggestions for improvements are properly prepared and presented. In many cases, the PMO will send an assistant program manager to monitor the initial fielding and record user feedback. The AFSB can provide support to the assistant program manager in the same way it supports FSRs, thereby reducing the burden on your command. This synchronized effort among the customer unit, the AFSB, the PMO, and FSRs is essential to ensuring that the weeks and months following the initial fielding are a positive experience for everyone involved.

The ALT-D in the AFSB provides a unique service. Having a basic understanding of the core competencies of the ALT-D will allow commanders and staff officers to maximize their ability to effectively state operational requirements, choose the best fielding and training plans, and ensure a proper transition to sustainment operations.

The ALT-D's capabilities can be applied to the tactical, operational, and in some cases, strategic level. Tactical units seeking a materiel solution for a capability gap can leverage the skill sets of the science and technology officer for liaison with the REF teams and follow-on ONS development. Operational commanders can unburden their staffs by empowering the AFSB to conduct the detailed PEO and PM coordination tasks necessary for successful fieldings. Lastly, at the strategic level, the ALT-D can perform acquisition- and technology-related liaison tasks.

You should include the AFSB when your battalion, brigade, or division is considering, or is in the middle of, requirements generation, fieldings, or liaison with PEOs or PMs. Engaging the AFSB ALT-D's capabilities will link your command with the Materiel Enterprise and enable successful acquisition, logistics, and technology activities.

Lieutenant Colonel Steven G. Van Riper is the director of acquisition, logistics, and technology in the 402d Army Field Support Brigade. He is certified as level III in program management and level II in systems planning, research, development, and engineering-systems engineering. He holds an M.S. degree from the Naval Postgraduate School and is a member of the Army Acquisition Corps. He was previously assigned as an assistant program manager in the Technology Applications Program Office.

Sustaining a BCT in Southern Iraq

BY LIEUTENANT COLONEL MICHAEL B. SIEGL

n August 2008, the 2d Brigade Combat Team (BCT), 4th Infantry Division, deployed from Fort Carson, Colorado, to Iraq for Operation Iraqi Freedom (OIF) 08–10. The brigade expected to be executing combat operations but instead, because of the operational environment, began stability operations in the Multi-National Division-Central (MND–C) area of operations.

MND–C, which was redesignated as Multi-National Division-South, was an area that spanned Iraq from the southern part of Baghdad to Basra near the borders of Kuwait and Iran. The 2d BCT established operations in numerous locations that ranged from built-up areas like Kalsu, Echo, and Basra to small outposts that were constructed while platoon- and company-sized units were moving into the area. In this environment, the 204th Brigade Support Battalion (BSB) conducted sustainment support operations for the 2d BCT.

MND–C's nonlinear, contiguous operational environment challenged the BSB's logistics capabilities. Although the modular structure of the BSB (with its forward support companies [FSCs] attached to the BCT's maneuver battalions) provided the enhanced capability and flexibility required to support the dynamic nature of the BCT's missions, the BSB's logisticians had to work through some unique challenges.

Split Operations

In the initial stages of the deployment, the 204th BSB supported the 2d BCT, which had over 4,500 personnel in over 10 locations that were spread across 13,500 square miles in multiple provinces. The asymmetrical nature of the area of operations required split operations, with the BSB at Forward Operating Base (FOB) Kalsu supporting one organic 2d BCT battalion and over 15 area-support organizations. A BSB logistics task force (LTF), consisting of elements of the base companies of the BSB and the medical company, was located at Camp Echo along with the BCT headquarters, two of the BCT's battalions, and area-support units.

The split operations optimized the capabilities of the BSB to mitigate the comparative weaknesses in the Iraqi sustainment support infrastructure. However, the split operations placed stress on the BSB's personnel and equipment availability, especially in the beginning stages of the deployment. They required the BSB to operate multiple logistics nodes, including class I (subsistence) warehouses and field feeding; classes II

(clothing and individual equipment), IV (construction and barrier materials), and IX (repair parts) operations; ammunition transfer holding point operations; and central receiving and shipping point operations at both Kalsu and Echo.

While at Kalsu, the BSB operated a supply support activity (SSA) with over 6,000 items worth more than \$40 million; it was one of the largest SSAs in MND–C. The BSB also operated a level II medical facility at Camp Echo.

Realignments and Relocations

Because a changing environment and an adaptive enemy necessitated changes in lines of operations and realignment of 2d BCT forces, the 204th BSB assisted in the relocation of equipment and personnel. It also continued sustainment replenishment operations during realignments, closures, and transfers of outlying locations to the Iraqis and follow-on forces. The new locations required increased supply stocks to ensure continuing sustainment support when the weather or the threat of enemy attack prevented the dispatch of logistics convoys.

Throughout each relocation, the BSB's planning and execution of sustainment operations ensured that every BCT unit or area-support unit received the sustainment support needed to accomplish its operational mission. The realignment of the BCT to Basra province required the BSB to relocate initially from FOB Kalsu to Camp Echo and then to Basra. The sustainment of the BCT and the BSB during these relocations was facilitated by the doctrinal use of the LTF, which initially relocated from Camp Echo to Contingency Operating Base (COB) Adder (Tallil) and then to Basra.

In "leap frog" fashion, the BSB relocated to Echo while the LTF, established at Echo, continued to provide sustainment support to all BCT and areasupport units. Once the BSB was established at Echo, the LTF relocated south to COB Adder, where it established logistics operations to ensure continuity of sustainment support. Finally, 8 months into the deployment, the BSB and LTF were both established at Basra.

The relocation to Basra presented greater logistics challenges as the BSB took on an even higher head-count, more logistics nodes, and more outlying locations to support. At its peak, during a transition of forces between British units and the 2d BCT, the Basra class I warehouse supported an overall headcount of 8,500 personnel and 17 outlying locations.

The BSB operated one dining facility that supported 7,500 personnel. The BSB also inventoried and signed for an SSA to support all BCT and area-support units. For this endeavor, the BSB relocated the Bucca SSA to Basra. The move required dedicated line-haul assets from the sustainment brigade to relocate the authorized stockage list and the SSA's structural and digital equipment. Within 2 weeks of relocating the SSA, the BSB established SSA operations with 2,500 line items worth over \$18 million.

SPO Organization

The support operations (SPO) officer was placed in charge of the LTF, which established itself initially at Echo with the BCT headquarters while the majority of the BSB remained at Kalsu. The LTF operations cell was composed primarily of a few SPO personnel and some noncommissioned officers (NCOs) and Soldiers from the base companies that formed the LTF. Essentially, the LTF operations center became the BSB's forward operations center. However, the BSB's automation architecture and modification table of organization and equipment did not facilitate two operations centers.

Reorganization and cross-training of personnel in the SPO section were necessary to facilitate the dual operations at Kalsu and Echo. Unfortunately, because split operations were not considered for the SPO section while at home station (in part, because the battalion did not know the final force array for Iraq until the BCT arrived in theater), the SPO section had only received minimal cross-training.

The lack of cross-training was exacerbated by the fact that many of the personnel in the SPO section were new to their positions. So the focus was on getting the personnel trained for their assigned positions. On-the-job training and maximizing the talents of the personnel, even if the tasks were outside their military occupational specialties (MOSs), were critical to accomplishing the mission.

Transportation and Logistics Convoys

In general, the 204th BSB and its FSCs executed logistics as outlined in current doctrine. The FSCs were able to support the outlying locations with minimal support from the BSB according to the BCT concept of support. However, some additional organic transportation equipment was needed so the BCT could move class VII (major end items) around the area of operations.

The BSB and FSCs did not have all of the transportation equipment needed for operations in Iraq. Heavy equipment transport (HET) vehicles and trailers were essential in facilitating the BCT's many relocations. Theater logistics units (the sustainment brigade) and local contractors provided many of the

heavy-haul trucks, but they had trouble filling the BCT's numerous transportation requirements. So the BSB obtained HETs through theater-provided equipment (TPE) so that it could provide responsive transportation support for the BCT's relocations. HETs should be an organic BSB asset in every heavy BCT.

Although the BSB and FSCs were able to receive some TPE, some items, such as palletized load system flatracks, were difficult to obtain. The BCT attempted to bring all of its flatracks from home station, but only a portion of the flatracks were approved for deployment to Iraq. The rationale was that flatracks were available in theater, but it took months to acquire enough flatracks to meet the BCT's requirement. This delay hindered logistics operations, especially because units could not do flatrack exchanges of 20-foot MILVANs [military-owned, demountable containers]. Unfortunately, MILVANs cannot be placed on containerized roll-in/roll-out platforms, which were readily available in theater.

Not having enough flatracks for flatrack exchanges meant that the BCT had a greater requirement for materials-handling equipment (MHE), especially rough-terrain container handlers (RTCHs) and cranes, to move MILVANs on and off the flatracks. The requirement for MHE was especially critical in outlying locations. Part of the solution was to contract for MHE with local vendors. The BSB SPO section served as the contracting officer's representative for the MHE contract in Basra. In locations where no RTCHs or cranes were available, units maximized the use of the container handling unit and sometimes the M88 medium recovery vehicle to move containers.

Early in the battalion's reset before deployment, the BSB commander decided to create a convoy security detachment (CSD) that eventually became a 45-person platoon with 3 squads. Each squad consisted of four gun trucks that operated as a team to provide security for the battalion's logistics convoys.

The initial training for the CSD occurred in December 2008 at home station, with a team from Fort Knox facilitating the gun truck training. This training enabled the CSD to learn the essential skills of maneuvering, communicating, and shooting. Because all BSB convoys were secured by the CSD, the formation of the CSD and its training was critical. In fact, the BSB convoys were more often limited by the availability of the CSD to provide security than by the availability of transportation assets to haul supplies.

Digital Systems and Enablers

The Battle Command Sustainment Support System (BCS3) is intended to provide and manage the logistics common operational picture (LCOP) in the BCT. One

of BCS3's functions is to capture the logistics status of subordinate units and provide situational awareness of the state of logistics supplies within battalions.

However, BCS3 was not used in MND–C by the 2d BCT, the sustainment brigade, or the expeditionary sustainment command. The LCOP for the BCT sustainment cell and SPO section was managed through ordinary computers with Secret Internet Protocol Router Network (SIPRNET) and Non-Secure Internet Protocol Router Network (NIPRNET) connectivity and processed and transmitted as logistics status reports through Microsoft Office programs.

Before deploying, the BCT command had emphasized the use of BCS3 as the Army logistics management system. However, two factors prevented the BCT from maximizing the use of BCS3 in Iraq. First, BCS3 is not user-friendly or very intuitive. Second, higher-level units did not emphasize the use of BCS3. Because subordinate units were not required to use BCS3, they reverted to using reports that were more user-friendly.

One of the BCT's automation capability gaps was the shortage of both SIPRNET and NIPRNET laptops. Since all logistics reporting was conducted through computers, computers and connectivity were essential for logistics operations.

Both SIPRNET and NIPRNET Internet connectivity for the LTF was facilitated by the local directorate of information management at Camp Echo. If that connectivity had not been present, the LTF would have had to rely on linking with the battalion or BCT head-quarters located at Echo for Joint Network Node or Command Post Node (CPN) capability since the BSB only had one CPN. This would have severely limited the capability of the LTF since most actions were conducted over the Internet and the tactical network had limited ports.

Sustainment Support for the BCT

Doctrine provides a framework for action that helps mitigate uncertainty without eliminating it, but it cannot anticipate the dynamic results of the interaction of forces within an area of operations. Doctrine cannot be prescriptive; it will not accurately reflect an evolving, chaotic, nonlinear environment. Nevertheless, doctrinal processes help formulate concepts of support and plans that match the context and circumstances within a unit's area of operations.

Changes to the BCT's organization and the move toward distribution-based logistics with pulsed operations for replenishment have modified the BCT's logistics infrastructure. However, FOB operations and how forces are arrayed within a nonlinear environment preclude the sole use of distribution-based logistics at the BCT level. Supply-point distribution was used in the FOB environment quite frequently.

One of the 204th BSB's primary tasks was to develop a concept of support that sustained the combat outposts (COPs) and joint security stations (JSSs) in the area of operations. While some of these locations were resupplied by the FSCs, others were resupplied by the BSB. Acquiring services and equipment for improving the quality of life at COPs and JSSs became the responsibility of both the brigade S–4 and SPO sections.

In the initial stages, as the S–4 section responded to the large contractual requirements of supporting the outlying locations (as well as the main FOB locations), the BSB provided many of its own organic electricity generators to the maneuver units to bridge power generation gaps. The BSB also procured water and fuel bags to help build up storage capacities at the COPs and JSSs to reduce the frequency of logistics convoys to those sites.

Contracting to fill capability gaps was critical and required either the SPO or brigade S-4 section to have personnel with training in contracting. While the brigade S-4 procured the reefers [refrigerated vans] for the BCT, the BSB ensured that the reefers were equitably distributed and fully supported the field feeding plan.

The base life sustainment of the COPs and JSSs was an organized effort by the BCT's force protection cell (brigade engineers), S–4, and BSB (primarily for transportation support). Because COPs and JSSs may be located in cities, building up sustainment stocks at these locations to reduce the frequency of resupply was the best method to lower the visibility of the coalition presence in the cities. The BSB planned on a 5-to-7-day contingency stockage of most supplies at the locations. This ensured continuity of supplies in the event of contingencies and emergencies, such as when resupply operations were hindered by weather or operations.

However, stockage at some of the locations was limited by space and equipment. For rations, reefer capacity was the biggest limiting factor. In some locations, 20-foot reefers were too large. In those situations, units purchased smaller freezers and refrigerators locally to maximize the available space.

The BSB originally used a synchronization meeting to coordinate supplies and logistics convoy schedules based on operations and intelligence updates. When split operations were conducted at Kalsu and Echo, the amount of information that had to be discussed and synchronized was manageable within the time allotted for the synchronization meeting. However, when the BSB consolidated at Basra and all units were supported out of one location, the convoy synchronization meeting became immersed in determining sustainment requirements and less focused on operations and intelligence.

As a result, the BSB created the commodities meeting. This ensured that the convoy synchronization meeting (held immediately after the commodities meeting) remained focused on operations. The commodities meeting was dedicated to determining units' supply and service requirements out to 7 days. Like a training meeting, the intent was to identify requirements and apply resources and capabilities to those requirements. In this case, the meeting focused on supplies and transportation assets.

Class I Operations

One of the 204th BSB's major challenges with field feeding operations in Basra was the sheer size of the task. At its peak, the number of mouths to feed was 8,500—double the size of what the BSB's class I section normally supported. Many of the personnel were new to the field feeding section right before deployment and had not been trained in class I operations. Most of the MOS 92As (automated logistical specialists) had previously worked only in class IX operations, so class I operations were new for many of them.

Because of the enormous requirement, the class I section was augmented with Soldiers from other sections. If field feeding operations had revolved around modular boxes of meals ready-to-eat and unitized group rations, the class I mission would have been much easier, despite the headcount. However, the field feeding section had to fill requirements for a variety of supplements and menu options that rivaled those at on-post dining facilities. MOS 92A Soldiers should receive more in-depth field feeding training at advanced individual training and other Army Training and Doctrine Command schools and should cross-train with MOS 92G (food service specialist) Soldiers.

Other primary obstacles to the class I mission were a shortage of reefers and insufficient reefer maintenance. Although the procurement of reefers was initiated before the brigade entered Iraq, it took several months to receive them at Camp Echo and FOB Kalsu. Many of the reefers were locally made and substandard and required constant maintenance. Because the reefers were locally produced, the Army mechanics initially had a difficult time maintaining them because of a lack of manuals and proper tools.

Each BCT should have a fleet of reefers and organic Army mechanics trained in reefer maintenance robust enough to fill requirements. This fleet of reefers would provide the initial capability to hold frozen foods, fresh fruits and vegetables, and ice.

Maintenance

The 2d BCT, like all brigades with mine-resistant ambush-protected vehicles (MRAPs) in Iraq, had problems with the MRAP's fire suppression system (FSS)

bottles, sensors, and power backups. While some of those problems had to be addressed at the Army level, the 204th BSB ensured the operational readiness of the 2d BCT's MRAPs. Specifically, the BSB worked to develop an organic capability within the unit to refill MRAP FSS bottles instead of relying solely on the Army Materiel Command's refill stations. The 204th BSB was the first unit to have such a capability in MND–C.

Having the organic refill capability allowed the BSB to help the BCT to maintain combat-ready platforms. The BSB shared this knowledge with other BCTs to ensure the operational readiness of all MRAPs in MND–C. Nevertheless, supply parts for the MRAPs, especially sensors, FSS bottles, and power backups, continued to be a problem since MRAP parts supply was still contracted and those items were not available through the Army supply system.

The BSB worked with representatives from the Defense Logistics Agency to get 100 refill kits shipped directly to the BSB. Once the refill kits were received, the BSB was able to make the MRAPs fully mission capable. Before attempting any type of fire suppression recharging, personnel must receive proper training by experienced technicians, and the local fire department should approve FSS recharging stations before refill operations commence.

During its deployment, the 204th BSB completed nearly 1,000 sustainment missions that covered approximately 39,000 miles. The BSB and its FSCs conducted sustainment replenishment operations to deliver more than 1.1 million gallons of water, 200,000 pounds of ice, 300,000 gallons of fuel, 40 tons of ammunition, and 482 pallets of class IX.

The 2d BCT dealt with multiple relocations and support requirements that greatly exceeded those typical for a heavy BCT's BSB. But the 204th BSB integrated nondoctrinal and doctrinal solutions to overcome obstacles to sustainment support operations for the BCT. The constraints of the area of operations required the ingenuity and flexibility of the BSB's leaders and Soldiers. The teamwork exhibited by all of the logistics players in the BCT ensured that sustainment support operations continued unabated through all operations.

Lieutenant Colonel Michael B. Siegl is the deputy G-4 of the 2d Infantry Division at Camp Red Cloud, Republic of Korea. He was the executive officer and support operations officer of the 204th Brigade Support Battalion, 2d Brigade Combat Team, 4th Infantry Division, during Operation Iraqi Freedom 08–10. He has a B.A. degree from Stanford University and an M.A. degree from Georgetown University. He is a graduate of the Quartermaster Officer Basic Course, Combined Logistics Captains Career Course, and Army Command and General Staff College.

A Neglected Principle of War in Logistics Advising

BY MAJOR JAMES J. ZACCHINO, JR.

arious military transition teams are partnered with Iraqi police, air force, and army units to develop Iraqi Security Forces (ISF) capabilities. However, a leading challenge in the continued development of ISF capabilities rests in the coalition's capacity to organize the training and advising mission at the tactical and operational levels under one command.

The current structure of the ISF logistics development partnership comprises several commands at various levels, each with a different focus. Although the commands share a vision for a self-sustaining ISF, the operational strategy, sourcing of adviser skill sets, adviser preparation, and command emphasis differ based on the needs of the Iraqi echelon with which the transition team is partnered. Despite unified action, the absence of unity of command limits the Iraqis' ability to develop initiatives and sustain Iraqi logistics in the long term.

An Attempt to Unify Effort

In October 2009, the primary units assisting with Iraqi Army logistics development in the Baghdad area of responsibility were Multi-National Corps-Iraq (MNC–I), Multi-National Division-Baghdad (MND–B), Multi-National Security Transition Command-Iraq (MNSTC–I), and the 10th Sustainment Brigade. These organizations had ISF logistics sections and subordinate training, advising, and transition teams partnered with the Iraqi Army from the depot to the foxhole. At the MNC–I level, symposiums were held quarterly to integrate commands and to achieve unity of effort.

The 10th Sustainment Brigade conducted quarterly reviews with the expeditionary sustainment command, its higher headquarters, to assess metrics and share best practices among the sustainment brigade's transition teams. Meetings were also held within MND–B and MNSTC–I to discuss challenges and attainable targets, but resources and efforts across the logistics-development spectrum were not synchronized. As the Iraqi Army was being redeveloped, logistics efforts were not aligned with the development and capabilities. The unity of effort was attempted at the action officer and staff level, but not among commanders.

Command Relationships

According to Field Manual 3–0, Operations, command relationships provide the basis for unity of

command and unity of effort in operations. MND–B was partnered with Iraqi Army divisions. Sustainment brigades were partnered with Iraqi Army division support maintenance units and the division's motor transportation regiment. MNSTC–I was partnered with the Iraqi Army depot- and national-level entities. These commands received guidance from and reported to different commanders.

The relationships among the various organizations were further complicated by the frustration of constant changes of individuals and teams redeploying, which led to breaks in momentum and gaps in continuity. The numerous differences in development metrics, team capabilities, and commanderestablished priorities also created challenges.

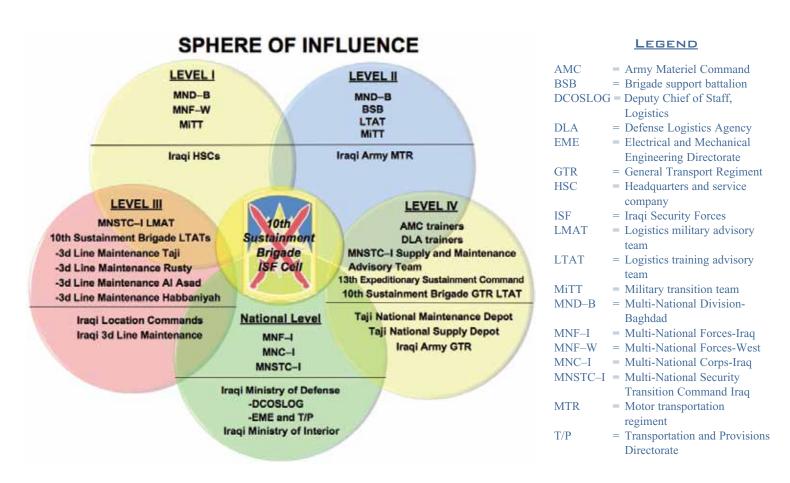
To mitigate these limitations, the 10th Sustainment Brigade's ISF logistics transition team sought to streamline the Iraqi Army's repair parts requisition process and maintenance doctrine by synchronizing, coordinating, and integrating the parts distribution and maintenance procedures from MND–B-partnered units through 10th Sustainment Brigade-partnered units and onward to MNSTC–I-advised agencies.

Gains in Iraqi Army efficiency and system confidence were minimal. Instead, the greater results of the initiative were military transition teams undermining outside commands, friction from transition teams with 10th Sustainment Brigade expectations, advisory teams and units with different priorities and agendas, and the need for unity of command. The current structure did not promote the development of Iraqi Army logistics.

A Need for One Command

Collectively, U.S. transition teams were not enabling Iraqi solutions to Iraqi problems. Units not synchronized and aligned with the long-term development strategy attempted to further Iraqi Army logistics by coordinating, supplying, and basically doing their counterpart's work toward self-sustainment. Coordination and cooperation toward common objectives are not enough for training and advising organizations to effectively engage the Iraqi Army.

Logistics development efforts and orders must be managed under one responsible commander. Our advisers, partnered throughout military and Government activities, must have reporting requirements,



This chart depicts the complexity of the Iraqi Security Forces (ISF) development mission and shows the agencies and levels with which the 10th Sustainment Brigade ISF Cell interacts. The way ahead for ISF self-reliance requires a unified effort of constant, consistent advising backed with sound Iraqi doctrine and policies. Multi-National Force-Iraq, Multi-National Security Transition Command-Iraq, Multi-National Corps-Iraq, the multinational divisions, the expeditionary sustainment command, and U.S. agencies, such as the Army Materiel Command, Defense Logistics Agency, and Army Training and Doctrine Command, and contractors all play a direct role in working toward ISF logistics self-reliance. The lines in this diagram separate coalition units from their Iraqi counterparts.

engagement criteria, development metrics, partnership standards, training resources, and synchronized partnership development and direction aligned under one command. Initiatives must connect to each other and lead to long-term goals. Elements of the advisory mission must be synchronized in order to coordinate development efforts throughout partnered echelons. Unity of command is fundamental. This relationship is essential for maximizing logistics development efforts.

As U.S. military capabilities change with a strategic reduction of forces, advising resources and requirements will adjust in Iraq. This shift in U.S. forces demands more reliance on the ISF to provide security and stability for Iraq's government and people. The advisory mission will only increase as the Army postures itself to help build the logistics skills of other foreign militaries and improve the stability of developing countries.

Unity of command is a necessary principle in synchronizing the resources and efforts of the advisory mission. This principle of war must be incorporated

in the tactical and operational logistics development strategy.

The efforts of the U.S. Army's training and advisory transition team play an increasingly critical role as we develop the capabilities of foreign forces toward self-sustainment and government stability. Sustained logistics is essential for any organization's long-term survival. Neglecting unity of command severely limits training and advisory capabilities in logistics development.

Major James J. Zacchino, Jr., is the support operations officer for the 548th Combat Sustainment Support Battalion, 10th Sustainment Brigade, at Fort Drum, New York. He was previously assigned as a logistics transition team chief during the brigade's deployment to Iraq. He holds a bachelor's degree in economics and an M.B.A. degree from Rutgers University. He is a graduate of the Multinational Logistics Course, Joint Course on Logistics, Petroleum Officer Course, Support Operations Course, Conventional Forces Europe Arms Inspector/Escort Course, Combined Arms and Services Staff School, Combined Logistics Captains Career Course, and Quartermaster Officer Basic Course.

Contract Oversight on the Battlefield

BY LIEUTENANT COLONEL PETER W. BUTTS

oldiers and Department of the Army civilians who oversee contractors on the battlefield must fully understand the magnitude and importance of their responsibilities. Army Materiel Command (AMC) contracting officer representatives (CORs) or contracting officer technical representatives (COTRs), such as those assigned to the Army Sustainment Command or Army field support brigades and their respective battalions, are responsible for ensuring that contractors strictly abide by their contracted performance work statements (PWSs), fulfill Army mission requirements, and uphold Government interests.

To define, safeguard, and execute their contract oversight roles and responsibilities, these Soldiers and civilians must attend the COR course offered by the Army Logistics University or Defense Acquisition University. Likewise, they must become well-versed in the Federal Acquisition Regulation and the Defense Federal Acquisition Regulation, which define the Government's rules for contracted business.

Team Effort and Lovalties

Because the Army does not have the total personnel strength or materiel capacity to satisfy all of its current mission requirements, contractors deliver the requisite manpower, equipment, and expertise to satisfy Army demands and provide practical applications to accomplish military support and sustainment missions. Melding contractors into the Army's missions generates a combat multiplier that enables military personnel to meet other operational requirements.

Through the COR course, Government employees gain an understanding of how to manage relationships with contractors in the workplace and during deployments and humanitarian assistance missions. The Government employee and contractor relationship forms the team effort required for mission success. Both entities must work closely together and develop good business and partnership practices.

However, despite their mutual mission-focused approach to satisfying Army requirements, contractors and Government employees each have different loyalties, and these loyalties are the driving force behind their overall purpose and motivation. Contractors seek to satisfy shareholders' expectations while maintaining good working and customer relationships with the Government and posturing themselves to



bid on and win the next contract. Soldiers and Army civilians defend and uphold the Constitution (Government interests), execute military orders, and support the commander's intent. Although contractors and Government employees have different loyalties, they are both charged and bound to execute the Army's mission at hand.



Relationship and Process Development

So, how does the Government monitor and provide vigilant contract oversight while influencing the contractor to maintain a team-effort attitude? First, Government employees use the contract agreement and PWS (which outlines what the contractor must accomplish under the contract) to ensure that the contractor supports and sustains the Army's mission. The contracting officer (KO) administers the contract, and the CORs and COTRs become the KO's eyes and ears in the field to ensure contractor compliance. A cost-reimbursable contract is a popular Government contract and is used especially when the end result or time needed to meet military mission requirements is uncertain or hard to define.

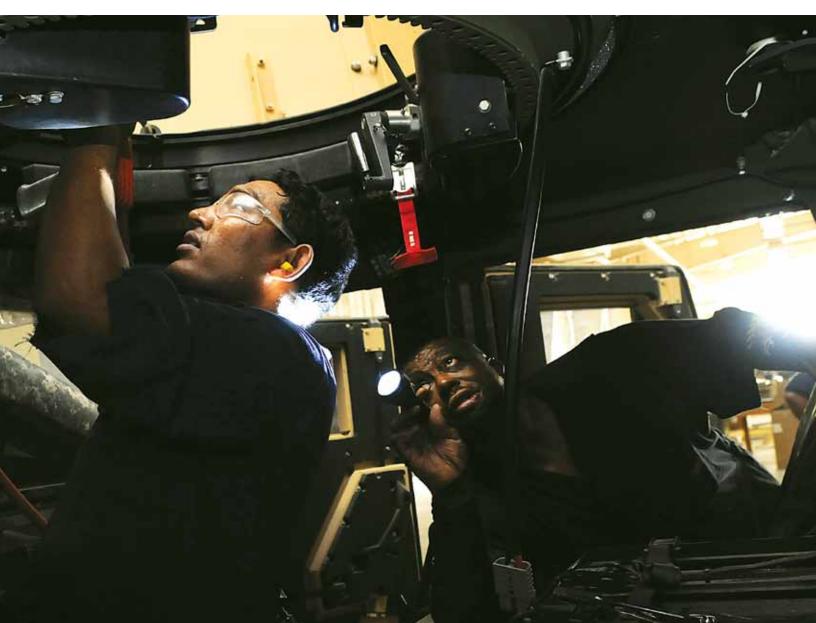
Second, so that the Government can avoid operational risk in meeting uncertain military requirements, the contractor may be contracted to fulfill a "security blanket" role. However, to oversee and employ this security blanket and reduce financial

risk, the Government must make sure that the contractor actually and diligently fulfills the terms outlined in the PWS.

Since a cost-reimbursable contract provides no financial incentive for the contractor to achieve spending or performance efficiencies, Soldiers and Army civilians with specific technical expertise become the honest brokers for Government interests, execute contract oversight, and ensure that the contractor is performing in accordance with the PWS. Without this keen oversight, Government dollars, time, and resources are subject to waste.

The sheriff at the forefront of the PWS and contract oversight mission is the unit's quality assurance representative (QAR). The QAR, along with the unit CORs and COTRs, develops the quality assurance surveillance plan (QASP), which includes the contract and the PWS checklist identifying the tasks, policies, and procedures that the contractor must perform and execute for the Government.

Two mechanics install turret parts inside a vehicle at the 1st Battalion, 401st Army Field Support Brigade, vehicle maintenance facility at Camp As Sayliyah, Qatar. (Photo by Dustin Senger)



A mechanic from Nepal hands tools to a mechanic from India inside the 1st Battalion, 401st Army Field Support Brigade, vehicle maintenance facility at Camp As Sayliyah. (Photo by Dustin Senger)

The QASP enables and guides the unit's CORs and COTRs to observe and validate specific contractor performance actions. As such, CORs issue warnings or corrective action requests (CARs) that document contractor deficiencies while performing or, in some cases, not performing tasks identified in the PWS. These CARs are reportable to the KO and are regularly reviewed to determine overall contractor performance. The CARs can affect the Government's decision to sustain or relieve the contractor from that particular contract.

The Pitfalls: Fraternization and Complacency

Two likely situations could arise from the Government employee and contractor team-effort relationship: fraternization and complacency. These two pitfalls can undermine mission success or cause a failure if CORs or COTRs do not provide the contract oversight needed to safeguard Government interests.

Fraternization occurs when a Government employee and a contractor who are involved in the same contract congenially socialize in any manner. Despite the close relationships that can develop among Government employees and contractors supporting the team effort, Government employees must understand that befriending or helping a contractor, including even giving him a ride in a personal or Government vehicle, could be misconstrued as preferential treatment and could cause a breakdown in the contract oversight process.

Moreover, an outwardly awkward relationship could develop from congenially socializing and cause the Government employee to lose the ability to objectively oversee the contractor's performance. This relationship could result in undue contractor influence or the Government employee's apprehension to execute proper contract oversight. Staying purely objective throughout the contract oversight mission enables CORs and COTRs to execute their individual roles and responsibilities and keep their minds on the Government's business.

Complacency by either the contractor or the Government employee, or both, can occur for various reasons and ultimately can chip away at the bedrock of established PWS requirements. The Government employee's failure to remain vigilant and follow the QASP can result from simply trusting the contractor to perform and execute contracted work instead of applying diligent, longstanding oversight for that contract, as required.

In a recent Government contract situation, for more than a year, a contractor had been complacent and had not been properly fulfilling its contractual obligations



outlined in the PWS. So the contracted company's leaders surveyed the situation and, in conjunction with the Government, relieved, suspended, or reassigned more than 30 contracted personnel, including first-line managers and a vice president. This action was executed immediately to clean up a contract situation gone awry and to fulfill the contractor's obligation to the Government's mission.

The complete success of a cost-reimbursable contract relies heavily on Government personnel being school-trained as CORs and COTRs and having a firm understanding of how proper contract oversight leads to Government money being well spent rather than wasted. Without this engrained knowledge of contract oversight, the Government could be a victim of fraud, waste, and abuse.

A contractor depends on the Government for business and wants to perform the job well to retain the contract and meet shareholder expectations. Commanders are responsible for making sure that their contracts are properly executed. Army commanders are responsible for making sure that their contractors properly execute the contract according to the PWS and that their KOs sustain efficient contract oversight. When Government employees are COR-course trained and have a solid understanding of how to execute their contract oversight roles and responsibilities, Government success prevails and the team wins.

LIEUTENANT COLONEL PETER W. BUTTS COMMANDS THE 1ST BATTALION, 401ST ARMY FIELD SUPPORT BRIGADE, WHICH OVERSEES ARMY PRE-POSITIONED STOCKS 5 AT CAMP AS SAYLIYAH, QATAR. HE HOLDS A DEGREE IN COMMUNICATIONS FROM THE UNIVERSITY OF NEVADA, LAS VEGAS, AND A MASTER'S DEGREE IN BUSINESS ADMINISTRATION FROM BAKER UNIVERSITY.

The Battery Manager Maintenance Program

BY LIEUTENANT COLONEL ANTHONY W. ADAMS, KYARNG

oorly managed vehicle battery maintenance can lead to early failure and unnecessary replacement costs. It can also take away time from a mechanic's daily schedule and his ability to perform other tasks, such as general troubleshooting and repair. Ultimately, poor battery maintenance will affect the readiness of a unit's rolling stock.

As the surface maintenance manager for the Kentucky Army National Guard (KYARNG), I have instituted a battery manager maintenance (BMM) program with the ongoing consultation of a private contractor, PulseTech Products Corporation. PulseTech incorporates its "smart" charger and maintenance technology into the BMM program and provides strong customer service and support.

The results have been impressive and rewarding. Before having access to PulseTech's smart technology and consultation services, the KYARNG exclusively used flooded-cell (wet) batteries. The average lifespan for a typical flooded-cell battery is 2 years on tracked vehicles and 3 years on wheeled vehicles. In the KYARNG, which has 292 full-time maintenance personnel and 40 temporary workers spread among 13 maintenance shops, we had averaged about 2,000 new batteries annually.

AGM Batteries

Two years ago, we began switching to the new Hawker absorbed glass mat (AGM) batteries and instituted our BMM program with the help of Pulse-Tech. Since then, we have had to replace less than 5 percent of our inventory of 2,500 Hawker batteries, representing a 90-percent reduction in year-to-year replacements. We also estimate that we have gained 1 man-year of available productive time because we spend less time replacing and maintaining batteries. Although the cost of AGM batteries is higher than the cost of the flooded-cell batteries we previously used, AGM batteries last longer, perform better, and can be safely shipped by air, ready to use.

To keep those AGM batteries at peak performance, we employ a variety of high-tech smart tools, including analytical testers and charging systems, such as heavy-duty rolling chargers and pallet chargers. Along with the technology, we have instituted a routine "cradle-to-grave" maintenance program that clearly defines procedures for handling and safety,

preventive and corrective maintenance, testing and diagnostics, charging, and replacement.

A Customized BMM Program

The KYARNG BMM program covers a wide variety of tracked and wheeled equipment, including multiple launch rocket systems, howitzers, armored personnel carriers, engineer equipment (bulldozers, scrapers, dump trucks, and front-end loaders), heavy equipment transporters, palletized load systems, heavy expanded-mobility tactical trucks, and high-mobility multipurpose wheeled vehicles. With approximately 3,500 vehicles, trailers, and generators, we needed a maintenance plan customized specifically to match our unique blend of battery service and maintenance equipment, battery inventory, and vehicle usage.

Roy Johnson, a retired Army warrant officer and Pulse-Tech's military liaison whom I first met at a conference in 2007, quickly pointed out that "one size doesn't fit all" when it comes to battery maintenance. Using PulseTech's Army BMM program, which the company has refined throughout its 20-year partnership with the military, we worked for several months with Roy to create a custom program that best suited KYARNG needs.

Through congressional plus-up funds, the Communications-Electronics Research, Development, and Engineering Center provided battery testers and chargers, and the KYARNG purchased additional equipment to round out the program. In total, we acquired Pulse-Tech's MBT–1 battery tester, 490PT battery analyzer, Pulse Charger/World Version, Pro-HD heavy-duty rolling charger, HD pallet charger, RediPulse

According to the Army TACOM Life Cycle Management Command, the eight major reasons for premature battery failure include—

- Insufficient run time.
- Battery self-discharge.
- Temperature failure.
- Dirty battery cases.
- Intermixing of batteries.
- Operator error.
- Faulty electrical systems.
- Physical damage.

Pro-12 charge/maintenance system, and other battery mobile shop and service equipment. However, it was PulseTech's ongoing consultations and seminars that taught us a battery's real capabilities. PulseTech provided onsite, hands-on training to maximize the benefits of charging and maintenance equipment (even if it was not their brand).

One of the best examples of benefits through this collaboration was the development of the MATES (Maneuver and Training Equipment Site) Battery Room Guidebook, which covers new battery turn-in procedures, battery worksheets, constant charge maintenance, state of charge, types of equipment utilized, and hard-to-charge batteries.

ALTHOUGH THE COST OF
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THAN THE COST OF THE
FLOODED-CELL BATTERIES
WE PREVIOUSLY USED, AGM
BATTERIES LAST LONGER,
PERFORM BETTER, AND CAN
BE SAFELY SHIPPED BY AIR,
READY TO USE.

The guidebook outlines our procedures for maintaining vehicle batteries. For example, when new batteries arrive, they are placed on the RediPulse Pro-12 pallet charger, which desulfates the plates and brings the batteries to a complete state of charge. Then they are ready for use. Twelve batteries are kept charged at all times; when one is taken off the charger to be used, it is immediately replaced with another.

When a vehicle is brought into the shop, the batteries are tested to ensure that they are holding a charge within 0.2 volts of each other. When that is verified, the Pro-HD charger is hooked up to the vehicle's slave receptacle. The Pro-HD returns the batteries to a like-new state without having to remove the batteries from the vehicle. Once the batteries are charged, they are checked for serviceability with the advanced battery analyzer. If a battery does not test to standard, it is replaced. That replaced battery then starts the process over again.

Reducing Waste

By using PulseTech equipment with smart technology, we can reduce waste. PulseTech equipment results in the rehabilitation and return to service of many "bad" batteries that had lost their charge while being stockpiled in warehouses.

As a battery ages through use or through sitting unused for a long period of time, lead sulfate crystals enlarge and can build up excessively to the point that they create a physical barrier across the surface of the plate. Before long, WE ALSO SPEND LESS TIME
WORKING WITH BATTERIES,
WHICH ALLOWS MECHANICS
TO BE MORE PRODUCTIVE IN
PERFORMING MECHANICAL
TROUBLESHOOTING AND REPAIRS.
AND BECAUSE OF THAT, OUR
SOLDIERS HAVE GREATER
CONFIDENCE IN THE PERFORMANCE
OF THEIR EQUIPMENT.

this buildup can become so dense that a battery can no longer accept or release energy, so it becomes a dead battery.

In the past, these "bad" batteries were stockpiled and discarded rather than evaluated and restored to service. Pulse technology has changed the way we look at battery life cycles.

Pulse technology, developed by PulseTech and patented in 1989, removes and prevents the buildup of damaging lead-sulfate deposits on battery plates in a nonharmful way so that a battery can accept, store, and release maximum power all the time. What makes pulse technology so unique and effective is the application of a distinct pulse waveform. This waveform has a strictly controlled rise time, pulse width, frequency, and amplitude of current and voltage pulse. No other known battery charging or maintenance system has these specific characteristics.

Although the KYARNG BMM program is essentially designed for keeping good, new batteries in peak condition for a longer period of time, we have also learned how to recover batteries that will not accept and hold a charge using conventional methods and equipment. We do this using new high-tech battery charging and maintenance systems that use pulse technology.

The KYARNG now pays more for batteries, but they last longer. We do not know exactly how much longer yet, but we can already see the cost savings in the amount of money spent on replacement batteries. We also spend less time working with batteries, which allows mechanics to be more productive in performing mechanical troubleshooting and repairs. And because of that, our Soldiers have greater confidence in the performance of their equipment.

LIEUTENANT COLONEL ANTHONY W. ADAMS, KYARNG, SERVES AS THE SURFACE MAINTENANCE MANAGER FOR THE KENTUCKY ARMY NATIONAL GUARD. HE HAS A BACHELOR OF ARTS DEGREE IN ENGLISH AND PHILOSOPHY FROM CENTRE COLLEGE AND IS A GRADUATE OF THE ORDNANCE OFFICER ADVANCED COURSE, THE COMBINED ARMS AND SERVICES STAFF SCHOOL, THE ARMY COMMAND AND GENERAL STAFF COLLEGE, AND THE JOINT LOGISTICS COURSE.

Support Operations: Lessons Learned in a Multifunctional Medical Battalion

BY LIEUTENANT COLONEL DOUGLAS H. GALUSZKA AND SERGEANT MAJOR DAVID FRANCO

s part of the greater transformation effort conducted by the Army in the last decade, the Army Medical Department (AMEDD) created a new unit called the multifunctional medical battalion (MMB), which includes a support operations (SPO) section. We think that the MMB's SPO organization is a poorly understood and often underused staff section. A literature review has found only two articles that discuss the MMB SPO section. Neither article is dedicated to this new staff section; they only briefly mention the SPO section and its capabilities. In this article, we will attempt to explain the roles and functions of the new MMB SPO section and discuss the lessons we learned while leading a SPO section in garrison and during a deployment.

Replacing Stovepiped Units

The MMB comprises portions of the former area support, evacuation, medical logistics, dental, and veterinary battalions. The MMB concept was adopted from the multifunctional logistics battalions formerly found in divisions and brigade combat teams: the forward support battalion and the main support battalion.

Previously, the stovepiped medical department battalions operated the same way as the old logistics battalions. In garrison, the battalions were functionally aligned, but a medical task force was normally created during a deployment. The MMB was developed to make this ad hoc deployment task force organization permanent, just as the innovative forward support and main support battalions did. This approach helps foster stronger relationships among the specialties and ensures that the battalion headquarters personnel will be experienced enough to properly command and control subordinate units, regardless of their specialty.

The MMB does not have a set modification table of organization and equipment (MTOE) other than that of the headquarters and headquarters detachment. The MMB has no lettered subordinate units. All units assigned to it are stand-alone, numbered companies and detachments that are assigned to the MMB in a tailored package for a specific deployment mission.

The key to commanding and controlling the diverse number and types of medical companies and detachments assigned to the battalion is a staff section that also was originally developed in multifunctional logistics units—the SPO section.

SPO Section Organization

The SPO section has the same mission in either a multifunctional logistics or multifunctional medical battalion: to plan, coordinate, and enable the external support provided by the battalion's subordinate units. The traditional S-shop staffs focus on internal personnel, supply, maintenance, training, and operations issues for the battalion. The SPO section and the S-shops have distinct, separate functions and focuses, though they require considerable coordination.

The MMB S-shops answer to the battalion executive officer (a medical service corps major), whereas the SPO section reports to the SPO officer (also a medical service corps major). Traditionally, battalions have an executive officer (a major) and an S–3 operations officer (a major), who both report directly to the battalion commander. The executive officer handles all administrative matters for the battalion while the S–3 handles training and planning.

SPO Staffing

The SPO section was added to logistics units to coordinate the external support that the battalion provided. Because of the importance of this section, the S–3 position was downgraded to a captain and the SPO officer-in-charge (OIC) was made a major. This same rank structure was built into the MMBs, with each major answering directly to the battalion commander.

The MMB SPO section (with 29 of the 77 authorized headquarters and headquarters detachment positions) was allotted a sergeant major as the section's noncommissioned officer-in-charge (NCOIC). Previously, operations sergeants major were only authorized at the brigade level, so this is a very significant addition to a battalion staff. The rank provides an experienced noncommissioned officer (NCO) who has great authority to help oversee the diverse and critical SPO section.

The SPO section is structured to have an assortment of subject-matter experts capable of providing oversight for any medical company, detachment, or team that could be assigned to the MMB. These experts'

specialties include medical maintenance, medical supply, behavioral health, veterinary services, patient administration, optical fabrication, laboratory services, preventive medicine, dentistry, medical operations and planning, evacuation, and practical nursing.

The rank structure is set up to ensure that experienced personnel are assigned to the SPO section. The most junior authorized rank for SPO NCOs is staff sergeant, and most of the NCO slots are sergeant first class. All of the officer slots are authorized at captain or chief warrant officer 3. This structure provides the requisite expertise to properly plan and manage the support provided by subordinate units. It also gives the staff officers and NCOs a high level of authority when providing guidance and enforcing standards. This high rank structure has proven critical to the SPO section's success.

Naming the Section

Unit leaders debated about what to call the SPO section after our unit, the 421st Evacuation Battalion, was redesignated as the 421st MMB in June 2007 at Wiesbaden Army Airfield, Germany. The MTOE refers to the section as force health protection (FHP). Field Manual Interim (FMI) 4–02.121, Multifunctional Medical Battalion, uses FHP to describe the overall mission of the MMB: "The FHP system encompasses the promotion of wellness and preventive, curative, and rehabilitative medical services. . . [and] is a continuum from point of injury or wounding through successive levels of care." The FMI does not call the

section the FHP, but uses the term "medical support operations."

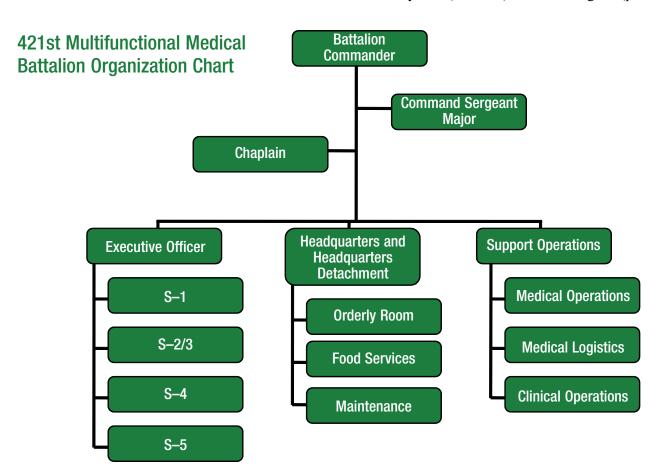
The term "force health protection" is confusing since it was commonly used in the past to describe preventive medicine efforts; outside units did not understand our capabilities and thought we were solely focused on preventive medicine. The term used in the FMI was adopted, but the word "medical" was dropped for convenience as well as to align us with the section in the brigade support battalions that coordinates external support—support operations. The section OIC is known as the SPO and the NCOIC as the SPO sergeant major.

The MTOE and FMI are also different in what they name the SPO subsections. The MTOE lists medical logistics, medical operations, preventive medicine, and mental health subsections, while the FMI lists medical logistics, medical operations, and clinical operations as subsections.

The section personnel listed in the MTOE and the FMI also differ. For example, the MTOE lists the military occupational specialty (MOS) 68WM6, practical nurse, in medical operations, but in the FMI, the position is listed in clinical operations. The 421st MMB decided to use the FMI structure of three subsections—medical operations, clinical operations, and medical logistics—with a captain OIC and a master sergeant NCOIC for each.

MTOE Deficiencies

The MMB should be authorized a Professional Filler System (PROFIS) battalion surgeon (preferably



a lieutenant colonel) for the special staff. Some missions will not require this position to be filled; others will. Having this authorization on the MTOE would enable the battalion commander to request a fill without having to justify the need to the Army Forces Command and Army Medical Command (as was required for the deployment to Iraq). It has been suggested that a nurse and a pharmacist should also be listed as PROFIS. These officers certainly could make contributions, but with the sergeant first class pharmacy technician and master sergeant practical nurse to team with a PROFIS battalion surgeon, the battalion would have the expertise needed to accomplish its mission.

The MTOE has no authorized tentage, light sets, or other items needed in field operations for the 29 SPO Soldiers. It authorizes only six 9-millimeter pistols for the entire headquarters detachment, with only one available in the SPO section. The SPO, SPO sergeant major, and chief warrant officer 3 should be provided pistols. It is also advisable to provide each of the three subsection OICs and NCOICs with a pistol because of their rank and responsibility in order to align them better with their counterparts in the S-shops.

Transportation is another issue. Currently, only two high-mobility multipurpose wheeled vehicles and two 2½-ton trucks are authorized. Even with the ideal configuration and types of vehicles, the SPO section could only transport half of its personnel at one time—a difficult situation if the battalion is maneuvering during a campaign.

Developing SPO's Role in the Battalion

The addition of the SPO section to the MMB was a step forward in planning and oversight, but the transformation was not completed at the higher levels of command. Logistics battalion SPO sections coordinate with similarly structured sections in the sustainment brigade. This is not the case with the MMB SPO section; no SPO section exists in any medical brigade or medical command. When the MMB SPO section needs to coordinate efforts with the medical brigade or medical command, it has to work with three separate sections: G–3, G–4, and clinical operations. This leads to many challenges in consistency of guidance and coordination of efforts.

Because subordinate units and higher headquarters are more familiar with the S-shops than they are with the SPO section, many SPO-related issues are referred to and worked by the S-shops. The FMI actually contributes to this confusion. It states that the SPO section needs to work with the S-shops because the S-1 will provide personnel casualty estimates, the S-2/3 will gather medical intelligence and provide clinical input for FHP estimates and plans, and the

S–4 will provide support for all class VIII (medical materiel) requirements.

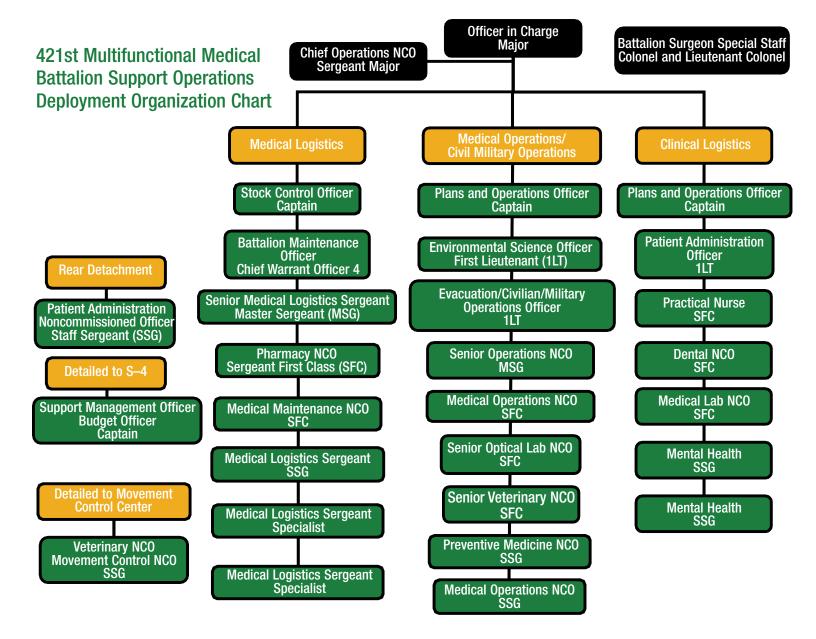
Combining the SPO section with the S-shops divides the responsibility for planning, coordination, and oversight of the external support provided by the subordinate units between the SPO section and the S-shops and only leads to confusion. The entire reason for creating the SPO section was to unify the coordination of external support under one section where clinical, logistics, and operational requirements can be planned and tracked. Having it any other way nullifies the need for the SPO section.

The 421st MMB SPO section performed all of the functions mentioned above. It found that creating clear and distinct lines of responsibility was necessary. All internal administrative, training, and operational matters, such as awards, evaluation reports, ranges, convoys, unit status reports, property book, and ground maintenance, are the responsibility of the S-shops. All external support provided and planned for, such as borrowed military manpower memorandums of agreement, expert field medical badge training, MOS 68W (healthcare specialist) sustainment, medical maintenance oversight, medical taskings, medical support planning, workload data collection, subject-matter expert guidance, and medical maintenance, is the responsibility of the SPO section. In short, anything that deals specifically with a medical function or capability is the SPO section's concern; everything else is worked by the S-shops.

In garrison, the SPO section needs to actively seek out projects to keep exercising its planning and coordinating skills. In the garrison environment, the S-shops naturally become the focus of the headquarters' efforts. Personnel and property administration, equipment maintenance, and Soldier training need to be consistently executed to ensure that subordinate units are ready to operate properly when in the field. But the SPO section cannot become merely a personnel mine for NCOs and officers to conduct additional duties and taskings because, in the field, the SPO section becomes the focus of the headquarters efforts and must be prepared to meet those responsibilities.

It is important to seek out events to plan and coordinate, such as planning and executing an expert field medical badge training event, conducting MOS 68W sustainment training, or conducting a combat lifesaver class. For example, while the 421st MMB subordinate units were still going through transformation in Germany, the SPO section was the lead for planning the rebasing, inactivation, or transition to TDA (table of distribution and allowances) missions for medical logistics, preventive medicine, veterinary, and optometry units.

The SPO section should also be the planners, main trainers, and evaluators for subordinate units going



through mission readiness exercises or reset evaluations. The ability of subordinate units to conduct their medical missions, which involve all aspects of field craft and medical skills, is naturally the responsibility of the SPO section with its large number of senior subject-matter experts.

Coordinating the subordinate units' efforts was a challenge in the months following the 421st's conversion to an MMB. In fact, the battalion's deployment mission readiness exercise was the first time the SPO section planned and coordinated functions for subordinate units in the field. With the 421st MMB commander's support, the efforts of the SPO officers and NCOs at the mission readiness exercise displayed the full capabilities of this robust staff section.

Preparing for Deployment

The new SPO and SPO sergeant major were assigned to the section in the summer of 2007. With

a deployment planned for 2008, filling the authorized SPO personnel slots was critical. The SPO and battalion leaders filled these slots through frequent communication with personnel managers at the brigade, regional medical command, and Army Human Resources Command.

Filling the low-density MOS positions was a particular challenge since these positions are for senior NCOs and this was a new type of unit with which they were unfamiliar. But these experts were deemed critical to the mission that the unit would inherit in Iraq. In particular, the optical fabrication technician, pharmacy technician, and practical nurse positions were "must fills" for the deployment. By the mission readiness exercise in August 2008, most of the positions were filled, though several Soldiers arrived during the predeployment block leave.

The 44th Medical Command allotted the 421st MMB a slot on its Iraq predeployment site survey

THE MMB IS A MODULAR ORGANIZATION, WHICH IS TAILORED BASED ON THE MISSION, ENEMY, TERRAIN AND WEATHER, TROOPS AND SUPPORT AVAILABLE, TIME AVAILABLE, AND CIVIL CONSIDERATIONS. THE COMMAND WILL INCLUDE MODULAR UNITS SPECIFICALLY TAILORED TO PROVIDE MEDICAL LOGISTICS SUPPORT, LEVEL I AND II AREA MEDICAL SUPPORT, GROUND EVACUATION, PREVENTIVE MEDICINE, COMBAT AND OPERATIONAL STRESS CONTROL, DENTAL, AND VETERINARY MEDICINE.

-MAJOR GENERAL GEORGE W. WEIGHTMAN

team. The SPO was selected to fill this slot. The trip gave him firsthand knowledge of the exact nature of the MMB's upcoming mission. The visits to health, optometry, and dental clinics; ground ambulance squads; and the battalion headquarters were valuable. The discussions with the 261st MMB SPO and S-shop sections regarding their training advice and concerns enabled the 421st MMB to tailor its predeployment training plan to match the mission it would execute.

The 421st MMB Headquarters and Headquarters Detachment deployed to Balad, Iraq, in the fall of 2008. The SPO OIC and the NCOIC of the medical operations section were in the advance party to help ensure the handoff from the 261st MMB was well coordinated from the start.

421st MMB Mission in Iraq

Several rotations earlier, the two MMBs in Iraq had aligned their missions functionally. Instead of having subordinate units assigned for all of the specialties, each MMB was assigned all of the units of a limited number of specialties, thus enabling the MMB staff to focus its efforts. This practice continued during the 421st MMB deployment. The mission of the 421st MMB was to command and control five area support medical companies, two dental companies, two ground ambulance companies, four optometry detachments, and one head and neck surgical team. (Our sister battalion, the 111th MMB, was responsible for the medical logistics, veterinary, combat operational stress control, and preventive medicine missions.)

The 421st MMB's units were scattered from Mosul in the north to Basra in the south and from Baghdad to Al Asad in the west at a total of 30 sites. Although the mission of each subordinate unit was important, the primary focus of the 421st MMB was level II medical, dental, and optometry clinics.

Tactics, Techniques, and Procedures

With the SPO section being such a new organization for AMEDD, no two deployed MMB SPO sections have been structured the same. Each has been

tailored to the mission based on the available personnel and the comfort level of the battalion commander and the SPO. In the 421st MMB, we used the FMI structure of three subordinate sections—medical operations, clinical operations, and medical logistics—as had the battalion we replaced.

Medical operations. The 421st MMB varied from its predecessors by ensuring that the medical operations section was not integrated into the S–3, where these two sections could not be distinguished from each other. The 421st medical operations section was kept separate to ensure the responsibility for planning and tasking for medical missions was maintained in the SPO section.

However, the S-3 shop issued all orders coming from the headquarters. Within the SPO section, all orders came to the medical operations section for review and, once approved by the SPO and SPO sergeant major, were passed to the S-3 for format review and issue.

The preventive medicine officer and NCO were placed in the medical operations section. Since the 421st MMB mission did not include theater preventive medicine, these personnel were only involved part time in preventive medicine issues. The rest of their time was spent assisting with medical operations functions and battalion extra duties, such as the safety officer.

An addition to the medical operations mission was civil-military operations (CMO). Since all of the training support coordinated for the Iraqis by the 421st was medical in nature (we were not involved in any medical humanitarian assistance efforts), CMO was brought into the SPO section. Since the 421st MMB had no air evacuation planning mission, the evacuation pilot of the medical operations section was made the battalion CMO officer. He worked closely with the civilian, contracted cultural expert, who was an Iraqi-American physician. The efforts of these individuals made the CMO mission a success, particularly in building a partnership with the Iraqi Ground Forces Command surgeon's cell. They met the goal of organizing two medical CMO training events each month.

Clinical operations. The clinical operations section was the medical administration section of the battalion. It collected daily workload statistics; updated and wrote standing operating procedures on such diverse topics as patient safety, laboratory controls, and infection control; and wrote fragmentary orders that the staff drafted in their areas of expertise. This section also worked very closely with the battalion surgeon in the battalion's effort to standardize care across the battlefield, a never-ending task as units came and went in the theater.

Medical logistics. The medical logistics section was responsible for medical supply, pharmacy, and medical maintenance oversight. Medical supply personnel assisted with researching required items and drafting letters of justification for equipment, assisted with Defense Medical Logistics Standard Support Customer Assistance Module (DCAM) ordering issues, and reviewed the monthly reconciliation reports. The pharmacy technician managed and set the standards for the pharmacy technicians working in the clinics. The surgeon and this NCO interacted frequently to ensure that the proper procedures for narcotics storage and issue were being followed.

Medical maintenance personnel reviewed medical equipment purchase requests, arranged for operational float equipment, scheduled services, and standardized equipment models across the battlefield to make maintenance simpler. This section also oversaw clinic renovation and construction by assisting the base mayor's cells with letters of justification, having floor plans drawn, and validating and arranging for furniture and equipment purchases.

SPO Battle Brief

The SPO section previously had no forum for presenting information to the battalion commander regarding the medical support provided by subordinate units. A biweekly SPO battle update brief was developed to present plans, taskings, subject-matter expert issues, and workloads to the battalion commander and the subordinate unit commanders through an online Adobe Breeze session. This proved to be a critical improvement for the battalion. Previously, only general administrative issues, such as officer efficiency ratings, awards, and the property book, were discussed at battalion command and staff meetings. With the SPO battle update brief, information on medical support efforts was shared, and the important medical missions of the battalion and the subordinate units were better understood by all, which greatly helped with planning and decisionmaking.

During the deployment, great strides were made in standardizing healthcare throughout the task force's area of operations. Quarterly staff assistance visits, new standing operating procedures, an enhanced peer review program, and the SPO battle update briefing were the most powerful tools used to raise the quality of care and enforce standardization in the clinics.

Overall, Task Force 421st MMB successfully conducted 170,000 primary care and 54,000 dental visits and 43,000 optometry examinations; completed 6,000 radiology studies and 28,000 lab procedures; fabricated 36,000 pairs of glasses; filled 87,000 prescriptions; provided medical support for 720 logistics convoys; and executed 22 CMO training events. This was certainly a team effort in which all the staff sections and subordinate units contributed, but the SPO section played a significant role in each of these achievements.

The SPO section has proven its worth to the MMB in garrison and at war. The expertise contained in the section makes it flexible and experienced enough to meet the diverse challenges that an MMB may face. The SPO section's variety of tasks and requirements is greater than in any other staff section in an AMEDD field unit. The success or failure of the battalion is largely determined by the performance of the SPO section.

The SPO section positions (such as medical operations officer, medical logistics officer, and clinical operations NCOIC) should be as valued and sought after in the future as the traditional S-shop positions are now. The SPO section needs to be better understood, supported, and valued in AMEDD. This greater understanding will foster more capable and better integrated SPO sections in all of the MMBs.

Lieutenant Colonel Douglas H. Galuszka was the support operations officer for the 421st Multifunctional Medical Battalion while stationed at Wiesbaden Army Airfield, Germany, and deployed to Joint Base Balad, Iraq. He holds a B.A. degree in history from Michigan State University, an M.A. degree in public administration from the University of Maryland-Europe, an M.H.A. degree from Baylor University, and M.M.A.S. degrees in military history and theater operations from the Army Command and General Staff College. He is a Fellow of the American College of Healthcare Executives and is a graduate of the AMEDD Basic Course, the Combined Logistics Officers Advanced Course, the Army Command and General Staff College, and the School of Advanced Military Studies.

Sergeant Major David Franco is the support operations sergeant major for the 421st Multifunctional Medical Battalion stationed at Wiesbaden Army Airfield, Germany, and cowrote this article while deployed to Joint Base Balad, Iraq. He holds a B.S. degree in business management from the University of Maryland-University College and has been inducted into the Order of Military Medical Merit. He is a graduate of the First Sergeant's Course and the Sergeants Major Academy.



Containers for Haiti: Providing Transportation and Temporary Infrastructure

BY THOMAS CATCHINGS

peration Unified Response provided overwhelming support to Haiti after the nation suffered a catastrophic earthquake in January 2010. Once the United States pledged its support, the Military Surface Deployment and Distribution Command (SDDC) Global Container Management (GCM) Division began the initial planning to provide containers not only for the transportation of humanitarian aid but also to serve as temporary storage and office space for the joint relief effort in Haiti.

SDDC's GCM staff visualized this support through the concept of "One Container at a Time". Using the concept, GCM staff assessed the uses one container could provide while on the ground in Haiti in addition to its traditional transportation role.

GCM, the program manager for the Master Container Leasing Contract for the Department of Defense, immediately activated one of SDDC's largest container-leasing contracts to obtain 1,525 dry and refrigerated 20-foot containers. These containers were

The Military Surface Deployment and Distribution Command Global Container Management Division shipped containers with food and supplies to Haiti in support of relief efforts after the 12 January earthquake there. The U.S. Agency for International Development (USAID) turned containers that had been emptied into classrooms. (Photos by Janice Laurente, USAID)







Haitian school children pose outside one of the first newly built classrooms constructed through a U.S. Agency for International Development (USAID) project. The classrooms took 4 weeks to construct and were built from shipping containers provided by the Military Surface Deployment and Distribution Command. Each classroom will last up to 10 years. (Photo by Janice Laurente, USAID)

delivered to locations across the southern states to support the World Food Program, the U.S. Agency for International Development, the Army and Air Force Exchange Service, the Military Postal Service Agency, and nongovernmental organizations.

GCM also sent out a "call for support" to all of the armed services to fill the container requirement. In answer to the GCM call, the Army moved more than 60 containers and the Navy supplied 4 refrigerated containers, 1 power-supply generator, and more than 30 modular containers for housing and office space to the Port of Jacksonville, Florida.

The GCM operations section began working with Joint Task Force-Haiti (JTF-H) and the U.S. Southern Command to establish three essential components of container management during Operation Unified Response: standing operating procedures, metrics for accountability, and container-tracking methods.

GCM's system section immediately met the need for container tracking and cost accountability by quickly modifying the U.S. Central Command's system of record for container tracking, the Integrated Booking System Container Management Module (IBS–CMM). Using this modified version of IBS–CMM, GCM saved taxpayers more than \$27,000 in commercial container fees and long-term costs for sustaining the relief effort.

GCM met the container storage and transportation needs, but it realized that it would need to deploy its team forward to Jacksonville and to Haiti to work with other organizations in managing and tracking these containers. Once initial coordination was made and the equipment and teams were in place, GCM shifted its efforts to the next critical need for support. GCM approached this mission in the same way as it has other deployments and applied its experience in the multiple uses of containers to meet Haiti's needs.

A container is not only the preferred mode of transport for supplies, it is arguably the best alternative for mobile storage, office, and living accommodations in areas where the infrastructure either does not exist or is being rebuilt. In Haiti, containers are now providing temporary infrastructure for offices, houses, and schools. GCM is working with JTF–H, U.S. Government agencies, and Haitian government agencies to meet this requirement.

The same containers that were used to quickly get the essential needs for human survival to Haiti are now used to support the education of Haitian children. Containers that brought water or food to Haiti now hold desks and chalkboards. Approximately 300 containers remain on the ground to provide temporary facilities in support of Haiti as it continues to rebuild its infrastructure.

Thomas Catchings is the Programs and System Program Manager for Global Container Management with the Military Surface Deployment and Distribution Command at Fort Eustis, Virginia. He holds a B.A. degree from Alabama State University and a master's degree in business management with a military focus from Touro University and is a Lean Six Sigma Black Belt. He is a graduate of the Army Command and General Staff College's Civilian Advanced Course and the Civilian Education System Foundation and Basic Courses.

Using Lessons Learned for Contracting in Haiti

BY LARRY D. McCASKILL

embers of the Expeditionary Contracting Command (ECC) nullified potential problems during their contingency deployment in support of Operation Unified Response, the Haiti humanitarian assistance and disaster relief mission. They did so by using lessons learned from previous deployments as well as by capturing new ones.

The first ECC Soldier arrived in Haiti within 48 hours of the devastating 7.0 earthquake on 12 January. During Operation Unified Response, ECC contracted for supplies, services, and equipment to support military and Federal responders as well as Haitians affected by the earthquake. The command helped to deliver more than 15 million meals to the Haitian people in a 10-day period and established distribution points for local families to receive 25- and 30-pound bags of rice, beans, and cooking oils. Contracting efforts also helped turn dangerous rudimentary shelters into safer areas with tents and routine delivery of water and meals.

"We took advantage of a lot of lessons learned from previous deployments," said Brigadier General Joseph L. Bass, commanding general of the ECC. "We didn't do these types of things early on in Operation Iraqi Freedom or Operation Enduring Freedom. However, we learned those lessons and brought these capabilities to Haiti early on. We were very proactive from the beginning, deploying the right personnel mix needed to provide quality assurance, legal, policy, and other areas where we could address issues on the front end rather than after they've been done."

General Bass added that establishing contracting reach-back support stateside, bringing in Logistics Civil Augmentation Program planners in the beginning stages, and working with units to establish coalition and joint acquisition review boards were lessons learned from previous military deployments to support operations in Kuwait, Iraq, and Afghanistan.

The Rock Island Contracting Center in Illinois provided support on an on-call basis, which allowed contingency contracting officers to concentrate on immediate onsite requirements and leave complex actions for the contracting center stateside. By the end of the mission, the ECC had created more than 380 contracting actions valued at almost \$12 million.

In addition to employing lessons learned, contracting officers also identified areas where challenges still exist. When contingency contracting officers (CCOs) arrived in Haiti, they relied heavily on support from outside units and agencies for basic life-support services. To ease the initial burden, the ECC has developed pre-positioned deployable equipment packages for its contracting teams as part of an early-entry equipment capability.

The ECC also identified, based on past lessons learned, that a contract review threshold needs to be established early to allow CCOs to adjust to the administrative requirements of contracting operations in a deployed environment. This allows oversight, management control, and quality control of high-dollar contract actions.

The fact that the simplified acquisition threshold increases from \$100,000 to \$1 million during a declared contingency operation does not mean that all CCOs should be issued a \$1 million warrant. Warrants need to be issued based on CCO experience and the dollar amount of actions needed to complete the mission.

"Just as we gathered lessons learned from previous deployments, we have gathered some from the Haiti deployment that should help us the next time we deploy," said General Bass.

One of those lessons is that the training and experience needed to create knowledgeable CCOs take time. In order to improve this process, General Bass and his staff want to create standardized reach-back support for contingency operations and are looking to establish a reach-back center of excellence for global contingencies that would align contracting contacts regionally with the combatant commands and the contracting support brigades. The center of excellence would integrate the reach-back points of contact into training events and exercises, create a logistics planning team for contracting, and provide assistance for immediate or complex requirements.

Larry D. McCaskill is a public affairs specialist with the Army Contracting Command. He is a graduate of Queensborough Community College and has more than 25 years of experience as an Army public affairs professional.

Contracting Support Brigade Responds to Haiti Mission

BY LIEUTENANT COLONEL AMERICUS M. GILL III

s critical components of crisis response, contingency contracting officers are often called in to help with disaster relief operations, which was the case immediately after an earthquake hit the nation of Haiti in January. The 410th Contracting Support Brigade's (CSB's) initial response to the disaster was to notify and provide commander's guidance to Major Ralph Barnes, the team leader of the 678th Contingency Contracting Team based in Miami, Florida. He deployed within 24 hours to support Operation Unified Response and was the first contingency contracting officer on the ground in Haiti.

This fast response represents a paradigm shift in not only the readiness of the acquisition corps but also the visibility of the capabilities of contingency contracting. The request for a contracting officer came directly from the commanding general of Joint Task Force-Haiti (JTF-Haiti), who was already on the ground. What followed was the first deployment of Expeditionary Contracting Command assets since the command achieved full operational capability in October 2009.

The 410th CSB's ability to deploy a contingency contracting officer within 24 hours indicates its focus. The team that deployed to Haiti served as a direct contracting asset to the JTF-Haiti commander and as the 410th CSB's assessment team to determine follow-on capabilities. In conjunction with discussions with the U.S. Southern Command, and while working through the military decisionmaking process, the 410th CSB decided to adopt a phased deployment approach with the end state being a fairly robust organizational structure.

The result was the creation of the CSB forward element and the Regional Contracting Center-Haiti (RCC-Haiti). The intent was to project a forward command and control capability that would have on-the-ground visibility and avoid a number of contracting risks that have plagued past expeditionary operations. The CSB forward element included an Army colonel, a judge advocate specializing in contract law, and policy and quality assurance personnel. Because of this structure, the 410th CSB was designated the lead for contracting and given responsibility for coordinating the joint contracting mission and personnel.

As with any contingency, actions taken were based more on a crisis management model than on established procedures. However, the results of operations without established procedures were incomplete requirements, inefficiencies, and redundancies. Fortunately, the contracting officers, who had experience from Iraq and Afghanistan, quickly assessed the need to establish operating procedures. In coordination with U.S. Army South (the executive agent for logistics and finance), RCC-Haiti assisted JTF-Haiti in establishing processes for creating a joint acquisition review board and guidance for field ordering officers and paying agents. This was done within the first 3 weeks of the deployment—an extraordinary accomplishment.

After the 410th CSB structure and processes guided the initial contracting environment, the 410th quickly turned its attention to risk management. Most of the attention turned to establishing programs for contracting officer's representative (COR) management and quality assurance.

To support RCC-Haiti, the quality assurance team on the ground, which consisted of the Expeditionary Contracting Command quality assurance manager and the 410th CSB quality assurance specialist, established a comprehensive COR management program. The program focused on training and technical assistance support for the CORs in Haiti. The team provided technical surveillance on numerous contracts until the unit's CORs were trained and in place. Three formal classes were presented, and 67 CORs successfully completed the course. The COR management program enabled properly trained CORs to provide on-the-ground technical monitoring of the contracts, ensuring that Soldiers received contracted supplies and services to meet their mission requirements.

The 410th CSB continues to support operations in Haiti, and although the brigade is making improvements based on many other observations, these represent some lessons learned in contracting operations in a contingency environment. As the Expeditionary Contracting Command focuses on its future capabilities, the areas of deployment, integration, and risk mitigation learned from Operation Unified Response will only serve to make future operational contract support more effective.

LIEUTENANT COLONEL AMERICUS M. GILL III IS A MEMBER OF THE ARMY ACQUISITION CORPS, SERVES AS THE S-3 FOR THE 412TH CONTRACTING SUPPORT BRIGADE AT FORT SAM HOUSTON, TEXAS, AND WAS ASSIGNED TO THE 410TH CONTRACTING SUPPORT BRIGADE WHEN HE WROTE THIS ARTICLE. HE HOLDS AN M.B.A. FROM THE UNIVERSITY OF TEXAS AT ARLINGTON AND IS LEVEL-3 CERTIFIED IN CONTRACTING.

Medical Equipment Concentration Sites: A Management Solution for Army Reserve Medical Equipment Repair and Training Needs

BY LIEUTENANT COLONEL PAUL WAKEFIELD, USAR (RET.)

The author suggests medical equipment concentration sites as a possible solution to the Army Reserve's deficiencies found by the Army Audit Agency.

he Army Reserve has a serious problem. It failed a 2008 audit, conducted by the Government Accountability Office and the Army Audit Agency, of its medical equipment maintenance program. The program's failures were also the focus of a RAND Corporation study that was presented at the August 2009 FORSCOM (Army Forces Command) Combat Support Hospital (CSH) Conference. The study showed that most of the medical equipment sets in the Army Reserve are not mission capable.

The sustainment and maintenance of Reserve component medical equipment sets have taken a back seat to other priorities and have not received appropriate attention and funding. Moreover, the existing medical equipment sets are too large and cumbersome for units to maintain properly.

Operational Changes

It was also noted during the FORSCOM conference that, effective immediately, regional training sites-medical (RTS-MEDs) will no longer provide medical maintenance support to CSHs. However, they will provide support to small modification table of organization and equipment medical units that do not have organic military occupational specialty (MOS) 68A biomedical equipment technicians (BMETs).

Currently, medical logistics companies are tasked to provide medical maintenance support to CSHs that have insufficient or no BMETs assigned. This practice frees up RTS-MED BMETs to do a better job of supporting the collective training needs of Active and Reserve component units.

Potential Problems

Unfortunately, under the current system, Reserve component CSHs do not have a viable way to repair

and maintain medical equipment without RTS-MED support. No training program is currently in place for BMET personnel to receive additional MOS training after they complete basic medical equipment training during advanced individual training.

Given these circumstances, it is clear that the current system for maintaining biomedical equipment in field units is inadequate. The Army Reserve must establish a system that will provide quality MOS training of BMETs. It also needs a system that will allow units to track, repair, maintain, and replace unserviceable medical equipment to meet medical equipment readiness requirements.

Basic Equipment Concentration Sites

To accomplish this, the U.S. Army Reserve Command (USARC) and the Army Medical Department should follow the RAND study recommendations and develop new medical basic equipment sets that are limited to the minimum amount of equipment that units need to conduct medical training at home station. Because of constraints on training and maintenance assets, basic equipment sets for the Army Reserve should not exceed 20 pieces of durable and nonexpendable medical items.

To best manage current and projected medical equipment repair and training requirements, the Army Reserve should adopt the Ordnance Corps' model of area maintenance activities and equipment concentration sites for the maintenance and sustainment of medical equipment items that are not part of the proposed basic equipment sets. We could call these "medical equipment concentration sites."

Using this model, the Army Reserve could establish four medical equipment concentration sites in the continental United States (two in the 807th Medical Deployment Support Command [MDSC]

area of responsibility, at Ogden, Utah, and Seagoville, Texas, and two in the 3d MDSC area of responsibility, at Fort Dix, New Jersey, and Gulfport, Mississippi). Army Reserve medical units would store all existing medical equipment sets (minus the proposed bare bones basic equipment sets) at these medical equipment concentration sites.

THE ARMY RESERVE MUST ESTABLISH A SYSTEM THAT WILL PROVIDE QUALITY MOS TRAINING OF BMETS. IT ALSO NEEDS A SYSTEM THAT WILL ALLOW UNITS TO TRACK, REPAIR, MAINTAIN, AND REPLACE UNSERVICEABLE MEDICAL EQUIPMENT TO MEET MEDICAL EQUIPMENT READINESS REQUIREMENTS.

Site Staffing Requirements

The two MDSCs would staff each medical equipment concentration site with four or five Active Guard/Reserve (AGR) medical maintenance personnel, three or four AGR medical logistics support personnel, three AGR materials-handling personnel, and three military technician administrative personnel. These spaces, intended to augment the units that conduct the medical equipment concentration site mission, would come from authorized full-time unit-support positions located in other Army Reserve medical logistics companies. Troop program unit (TPU) medical logistics personnel (MOS 68A and 68J, medical logistics specialist) would augment this full-time unit support staff on warrior training weekends and during extended combat training (formerly called annual training).

Most importantly, each medical equipment concentration site should include at least two BMET civilian contractors. These positions are key to the success of this support concept. Without civilian contractor support, the medical repair capabilities at medical equipment concentration sites will cease or become unsustainable when we mobilize the AGR or TPU logistics personnel assigned to conduct the medical equipment concentration site mission. The total annual cost for USARC to fund two full-time civilian contractors at each site would be an estimated \$640,000 to \$800,000 annually.

Site Facility Requirements

Each medical equipment concentration site facility should consist of at least 12,000 square feet of environmentally controlled warehouse space with shipping dock capabilities and an integrated medical maintenance shop designed and equipped to support the full scope of Army Reserve medical equipment. The medical equipment concentration site should have the necessary tools; test, measurement, and diagnostic equipment; materials-handling equipment; and medical repair parts to conduct proper maintenance operations.

These medical equipment concentration sites would enable the Army Reserve to provide Reserve component medical logistics personnel with quality mission-related MOS training opportunities during warrior training weekends and extended combat training. BMET personnel assigned to medical logistics companies that perform hands-on-training missions would also receive training opportunities while supporting customers.

USARC should fund and incorporate medical equipment concentration sites with full-time non-deployable civilian contract personnel, who are supported by AGR, military technician, and TPU medical logistics personnel. By doing this, medical maintenance readiness levels would improve dramatically, and units could focus less on maintenance and more on training requirements, especially during the critical train-up phase of the Army Force Generation cycle.

The contractor support option would provide continuity of service to nonmobilized Reserve component medical units when units with the medical equipment concentration site mission mobilize.

The medical equipment concentration site concept provides real training opportunities for all Reserve component medical logistics personnel, especially when the concept is used in conjunction with existing hands-on-training mission requirements. These benefits are worth the nominal added contract costs because the program will fix the medical equipment readiness problem and provide a way for the Army Reserve medical community to remain trained, ready, and relevant.

LIEUTENANT COLONEL PAUL WAKEFIELD, USAR (RET.), IS A PROJECT MANAGEMENT PROFESSIONAL. HE WAS THE CHIEF OF THE FORCE DEVELOPMENT OFFICE, 807TH MEDICAL DEPLOYMENT SUPPORT COMMAND, WHEN HE WROTE THIS ARTICLE. HE HOLDS A BACHELOR'S DEGREE IN SPANISH FROM WEBER STATE UNIVERSITY AND A MASTER'S DEGREE IN ADMINISTRATION AND MANAGEMENT FROM LINDENWOOD UNIVERSITY.

Improvement Strategies for Logistics Automation Support

BY CAPTAIN ANDREW M. SAWYER, CHIEF WARRANT OFFICER 2 ROSUNG D. PETTY, AND STAFF SERGEANT JONATHAN C. SHAW

he Sustainment Automation Support Managment Office (SASMO), 615th Aviation Support Battalion, is responsible for providing dedicated automation support to the various logistics automation systems of the 1st Air Cavalry Brigade, 1st Cavalry Division. SASMO provides technical assistance and customer support to sustain Standard Army Management Information Systems (STAMISs). [Editor's note: SASMO was known as the Combat Service Support Automation Support Management Office (CSSAMO) until January.]

SASMO comprises Soldiers from various backgrounds, including—

- ☐ Military occupational specialty (MOS) 15T, UH–60 helicopter repairers.
- MOS 15R, AH–64 attack helicopter repairers.
- MOS 92A, automated logistical specialists.
- MOS 88N, transportation management coordinators.
- MOS 25F, network switching systems operatormaintainers.
- MOS 25B, information systems operator-analysts. Each Soldier brings MOS knowledge and experience to support either a specific logistics automation system or the STAMIS network.

THE DILEMMA FOR THE
BATTALION WAS HOW TO
EMPLOY CSSAMO'S LIMITED
PERSONNEL TO EFFECTIVELY
SUPPORT A BRIGADE
OPERATING AT MULTIPLE
LOCATIONS IN A WIDELY
DISPERSED AREA.

Problems During Operations

When the 615th Aviation Support Battalion deployed to Operation Iraqi Freedom 09–11, SASMO was still known as CSSAMO. Its ability to provide quality automation support for the brigade's sustainment personnel was hindered for several reasons, which were primarily related to the lack of personnel to support split-based operations and new logistics

automation systems. As a result, the battalion faced considerable challenges.

The brigade was required to conduct split-based operations at multiple forward operating bases. This concept of decentralized operations required CSSAMO to support multiple logistics automation systems at various locations. However, CSSAMO was designed for centralized operations. CSSAMO's manning does not provide enough personnel to support the concept of decentralized operations. The dilemma for the battalion was how to employ CSSAMO's limited personnel to effectively support a brigade operating at multiple locations in a widely dispersed area.

The brigade received new logistics systems for condition-based maintenance (CBM) that enabled aviation units to repair components based on the component's actual condition. Unfortunately, the CBM training went directly to the fielded battalion without CSSAMO involvement. Without training on the CBM systems, CSSAMO could not properly support them. Consequently, those battalions did not believe that CSSAMO had the ability to support them.

Recommended Improvement Strategies

In July 2009, the 615th Aviation Support Battalion's leaders decided to improve CSSAMO. They focused on three improvement strategies: involve and empower, foster an atmosphere of continuous improvement and learning, and grow relationships between the battalions and CSSAMO.

Involve and empower. The battalion divided CSSAMO into two teams to increase Soldiers' involvement in learning other logistics automation systems. Each team consisted of a mixture of Soldiers with different backgrounds. A variety of STAMIS problems were given to each team to solve. The intent of this strategy was to produce competent and versatile CSSAMO Soldiers who could address various issues.

To empower Soldiers, decisionmaking authority was delegated to team leaders. This increased junior leaders' levels of responsibility in solving STAMIS problems. The empowerment of junior leaders was instrumental during the brigade's STAMIS network

upgrade. During this mission, two non-signal specialists planned and configured 14 satellite terminals to ensure connectivity for both aviation and ground vehicle maintenance. This leader development strategy helped to prepare junior leaders to make decisions on their own.

Foster an atmosphere of continuous improvement and learning. The ability to resolve complex STA-MIS problems required Soldiers to have knowledge of STAMISs and automation in general. The battalion developed a training program that focused on continuous learning and improvement for long-term success. The purpose was to broaden and sustain CSSAMO Soldiers' technical skills.

The training program involved formal training courses in conjunction with on-the-job training. The battalion used training courses from Baghdad Signal University, the U.S. Army Central Command Signal University, and the Automated Logistics Assistance Team-Iraq. From August to December 2009, CSSA-MO conducted over 800 hours of training on various subjects that included computer hardware maintenance, information assurance, computer networking, and various logistics automation systems. Cross training conducted in small groups reinforced the formal training. This practice gave unprecedented benefits to the support of the brigade's split-based operations.

THE GOALS OF EMBEDDING
SOLDIERS WERE TO PROVIDE
ON-THE-JOB EXPERIENCE
IN SUPPORTING THE CBM
SYSTEMS AND TO BUILD TRUST
BETWEEN THE BATTALIONS
AND THE CSSAMO SECTION.

As a result of the training program, CSSAMO Soldiers possessed the aptitude and technical expertise to support multiple logistics automation systems, rather than just one. This was crucial when the brigade deployed an aviation task force to another forward operating base. Its mission required CSSAMO to support five different logistics automation systems and establish a STAMIS network. Traditionally, the mission would require CSSAMO to send five or six Soldiers to support the aviation task force. Because of the training program, CSSAMO supported the aviation task force with only two Soldiers. The training program successfully increased CSSAMO's flexibility and capability to support split-based operations.

Grow relationships between the battalions and CSSAMO. The brigade developed a sense of uncertainty about CSSAMO's ability to provide automation

support for CBM technologies. The 615th Aviation Support Battalion embedded CSSAMO Soldiers with the 1–227 Attack Reconnaissance Battalion and 3–227 Assault Helicopter Battalion. The goals of embedding Soldiers were to provide on-the-job experience in supporting the CBM systems and to build trust between the battalions and CSSAMO.

CSSAMO'S SUCCESS
IN SUPPORTING LOGISTICS
AUTOMATION SYSTEMS
WAS THANKS TO LEADERS
CONTINUOUSLY SEEKING
WAYS TO DEVELOP
SOLDIERS.

The CSSAMO Soldiers learned how the CBM systems supported the brigade's aviation maintenance by working for the aviation maintenance officer of the battalion in which they were embedded. They also worked with the various CBM technical representatives to provide assistance for users. This allowed the CSSAMO Soldiers to articulate and resolve numerous CBM errors. As CSSAMO increased its ability to support CBM technologies, the trust between the battalions and CSSAMO improved.

CSSAMO's success in supporting logistics automation systems was thanks to leaders continuously seeking ways to develop Soldiers. Its ability to provide dedicated automation support for STAMISs in future full-spectrum operations needs appropriate Soldier development programs to be successful.

CAPTAIN ANDREW M. SAWYER IS THE S-6 FOR THE 615TH AVIATION SUPPORT BATTALION AT FORT HOOD, TEXAS. HE IS PRIOR ENLISTED AND A GRADUATE OF THE PRIMARY LEADERSHIP DEVELOPMENT COURSE, THE BASIC NONCOMISSIONED OFFICER COURSE, THE ENGINEER OFFICER BASIC COURSE, THE SIGNAL OFFICER ADVANCED COURSE, AND THE INFORMATION SYSTEMS MANAGEMENT COURSE. HE HOLDS A BACHELOR'S DEGREE IN COMPUTER INFORMATION SCIENCE FROM COLUMBIA COLLEGE.

CHIEF WARRANT OFFICER 2 ROSUNG D. PETTY IS A SUPPLY SYSTEM TECHNICIAN. HE WAS STATIONED WITH THE 675TH AVIATION SUPPORT BATTALION WHEN THIS ARTICLE WAS WRITTEN.

STAFF SERGEANT JONATHAN C. SHAW IS THE SUSTAINMENT AUTOMA-TION SUPPORT MANAGEMENT OFFICE NONCOMMISSIONED OFFICER-IN-CHARGE, HEADQUARTERS SUPPORT COMPANY, 615TH AVIATION SUPPORT BATTALION, AT FORT HOOD, TEXAS. HE IS A GRADUATE OF THE PRIMARY LEADERSHIP DEVELOPMENT COURSE AND BASIC NONCOMMISSIONED OFFI-CER COURSE AND HOLDS A BACHELOR'S DEGREE IN BUSINESS ADMINISTRA-TION FROM THE UNIVERSITY OF HARTFORD.

Fixing the Current Reserve Components Pay Process

BY MAJOR NOLAND I. FLORES, CAARNG

aying Soldiers their dues" is a common saying in military and political circles. But when it comes to actually paying Soldiers their hard-earned entitlements, it is often extremely hard to do, especially if the Soldier in question is a deployed Reserve components (RC) Soldier.

The current pay process for the Army National Guard (ARNG) and U.S. Army Reserve (USAR) has evolved into a cumbersome and complex system, and few, if any, personnel in military pay departments fully understand its breadth, scope, and weaknesses. What is worse, neither Soldiers nor the military pay departments can expect guaranteed, timely, and accurate payments of entitled benefits. Meanwhile, Soldiers and their families are often left wondering if all entitled benefits are paid—and that is never a good situation, particularly during these hard economic times.

Pay Problems

These deficiencies in pay and allotments have been well documented in past U.S. Government Accountability Office (GAO) audits of the ARNG and USAR mobilization pay process. The pay problems have ranged from payments delayed over 30 days to numerous overpayments and underpayments to mobilized members of the ARNG and USAR.

In an ARNG study released in November 2003, GAO analyzed the pay problems of 481 ARNG Soldiers during an 18-month period from 1 October 2001 through 31 March 2003. The total dollar amount of their pay problems during the course of their deployments was estimated as overpayments of \$691,000, underpayments of \$67,000, and late payments of \$245,000. Out of the 481 Soldiers, 450 had at least one pay problem during the course of their deployment; this accounted for 93.6 percent of the total number of Soldiers in the study.

These 481 Soldiers were part of 6 ARNG units that included 3 Special Forces units and 3 military police units. These units, each from a different state, had distinct missions and were deployed to various locations (including Guantanamo Bay, Cuba; Afghanistan; Iraq; and two locations in the continental United States) during their mobilization periods.

This author-developed tool (based on Army Regulation 37–104–4, Military Pay and Allowances Policy) defines pay problems experienced by Reserve component Soldiers. A tool like this should be used to identify and address pay problems.

To make matters worse, pay problems associated with the ARNG and USAR pay process grew exponentially as the role of RC units increased after the terrorist attacks of 11 September 2001. In the Iraq conflict alone, ARNG and USAR units have been so heavily involved that over 18,000 of the 155,000 Soldiers in the region in January 2008 were RC soldiers.

Payroll System Deficiencies

The Department of Defense (DOD) and the Army have been aware of these million-dollar pay problems associated with the ARNG and USAR pay system ever since the large RC role in Operations Desert Shield and Desert Storm. A 1993 GAO audit found millions of dollars in overpayments and other problems associated with Army payrolls as RC personnel returned from those military operations. A key factor that contributed to the improper payments was the large number of Soldiers being paid from the Army's active-duty payroll system.

Based on this study, the Army decided in 1995 to process pay to mobilized ARNG Soldiers from the Defense Joint Military Pay System-Reserve Component (DJMS–RC) system rather than the Active Army payroll system. Although this 1995 decision was intended to be temporary pending the adoption of an integrated system to pay both Active and RC personnel, DJMS–RC is still used in the Army's military pay process for mobilized RC Soldiers. Use of DJMS–RC was based on

The Classes of Pay Problems		
CLASS	DEFINITION	
А	A Department of Defense (DOD) pay problem that results in an overpayment, underpayment, or late payment (over 30 days) in excess of \$1,000,000 to a unit(s) or individual(s).	
В	A DOD PAY PROBLEM THAT RESULTS IN AN OVERPAYMENT, UNDERPAYMENT, OR LATE PAYMENT (OVER 30 DAYS) OF \$200,000 OR MORE BUT LESS THAN \$1,000,000 TO A UNIT(S) OR INDIVIDUAL(S).	
С	A DOD PAY PROBLEM THAT RESULTS IN AN OVERPAYMENT, UNDERPAYMENT, OR LATE PAYMENT (OVER 30 DAYS) OF \$10,000 OR MORE BUT LESS THAN \$200,000 TO A UNIT(S) OR INDIVIDUAL(S).	
D	A DOD PAY PROBLEM THAT RESULTS IN AN OVERPAYMENT, UNDERPAYMENT, OR LATE PAYMENT (OVER 30 DAYS) OF \$2,000 OR MORE BUT LESS THAN \$10,000 TO A UNIT(S) OR INDIVIDUAL(S).	

the premise that it provides the best service to RC Soldiers. Nevertheless, significant pay problems continue to affect RC Soldiers today.

Lack of Program Integration

Most of the pay problems are associated with the lack of integrated systems in the RC Soldiers' pay process. Since DJMS–RC does not recognize transactions in the ARNG and USAR personnel systems, personnel data inputs that affect pay to Soldiers are not reflected in the DJMS–RC pay system. Personnel transactions that affect pay may include promotions, demotions, and marital status. The lack of integration between personnel and pay systems results in erratic manual entry of transactions into multiple, nonintegrated systems and numerous over- and under-payments and late payments to mobilized RC Soldiers.

DOD attempted to develop a solution to the lack of integrated systems that cause pay deficiencies through the proposed Defense Integrated Military Human Resources System (DIMHRS). DIMHRS was intended to provide the armed services with an integrated, multicomponent personnel and pay system. DIMHRS was also supposed to address the problems that occur when RC Soldiers are called up to active duty and are lost in the system. Getting lost in the system and inaccurate entries obviously affect Soldiers' pay, credit for service, and benefits. However, development of DIMHRS encountered major technical problems, and DOD cancelled the program in March 2010.

GAO has reported that several organizations with key roles in payments to mobilized ARNG Soldiers have issued their own implementing regulations, policies, and procedures. These burdensome policies and procedures identified in a GAO audit study have contributed to pay errors for ARNG Soldiers. Because of a lack of clear guidance, some U.S. Property and Fiscal Office locations have established informal, undocumented reconciliation practices. For example, since no written requirements exist for conducting and documenting monthly reconciliations of pay and personnel mismatch reports, reconciliations are performed ad hoc or by informal means by each office location.

Short-Term Solutions

Most of the quality assurance methods that the Army has in place are reactive measures, such as audits and pay and personnel mismatch reports completed after the fact. Since most of the pay problems are not identified beforehand, it is important to have a standardized, best-practice approach as a proactive method for curtailing pay problems. Therefore, the time it takes to process the pay and personnel mismatch reports needs to be standardized across all 54 state and territorial U.S. Property and Fiscal Offices. Timely report processing also needs to be implement-

ed across USAR unit pay offices. To be effective, military pay technicians need the proper training before this approach is implemented.

In order to identify pay problems, DOD and the Army military pay facilities need to adapt a tool that classifies the types of pay problems. This tool should allow military pay facilities and auditing agencies to identify the type of pay problem they are facing. This tool also will allow the auditor and military pay facility to apply the appropriate financial guidelines, depending on the class of pay deficiency encountered. The chart at left shows a model that DOD can implement to identify the types of pay problems.

Long-Term Solution

The Army should consider implementing the Marine Corps Total Force System (MCTFS) as a long-term solution to the problem of military pay discrepancies. MCTFS is the only integrated military pay and personnel system in DOD. Using a single transaction, MCTFS updates both pay and personnel records. For example, when a Marine is promoted, the system processing the promotion transaction within MCTFS includes all the programming needed to ensure that both pay and personnel information are updated concurrently by the single input of the promotion transaction.

MCTFS is a vast improvement over the Army's troublesome DJMS–RC payroll system. MCTFS pays service members accurately and on time and contains accurate data for both Active and Reserve Marines in regard to state and Federal taxes, residency information, entitlements and allowances, special incentive pay, and allotments. The integration of pay and personnel means fewer resources are needed to perform simple input report procedures, pay and personnel functions are integrated seamlessly, and separate systems have no synchronization problems.

DOD and the Army tried unsuccessfully to implement DIMHRS. With all the resources and effort put into an unproven system like DIMHRS, DOD could have expanded on the proven success of MCTFS. The RC Soldiers have paid their dues with commitment, dedication, and sacrifice. It is time for Uncle Sam to pay RC Soldiers their hard-earned entitlements with accuracy and timeliness.

MAJOR NOLAND I. FLORES, CAARNG, IS THE EXECUTIVE OFFICER FOR THE HEADQUARTERS SUPPORT COMPANY, 640TH AVIATION SUPPORT BATTALION, CALIFORNIA ARMY NATIONAL GUARD. HE HOLDS A MASTER OF MILITARY ARTS AND SCIENCES DEGREE FROM THE ARMY COMMAND AND GENERAL STAFF COLLEGE AND AN M.B.A. DEGREE FROM THE AMERICAN INTERCONTINENTAL UNIVERSITY AND IS A GRADUATE OF THE HUMAN RESOURCES BASIC COURSE, THE FIELD ARTILLERY CAPTAINS CAREER COURSE, THE SENIOR TRANSPORTATION OFFICER QUALIFICATION COURSE, THE RESERVE COMPONENT THEATER SUSTAINMENT COURSE, AND THE ARMY COMMAND AND GENERAL STAFF COLLEGE.

Army Seeks Claimants Under Retroactive Stop-Loss Special Pay Program

BY ROBERT PIDGEON

he 2009 War Supplemental Appropriations Act directed all of the military services to pay members for time served from 11 September 2001 to 30 September 2009 under the stop-loss authority contained in Title 10, section 12305, of the U.S. Code. The retroactive stop-loss special pay (RSLSP) claim period ended on 30 September 2008; another program had previously been established to pay claimants for eligible periods from 1 October 2008 to the present. Those eligible receive \$500 for each month served in stop-loss status. The Army estimates that 120,000 Soldiers, veterans, and survivors qualify for RSLSP, which is by far the highest estimate from any service.

The War Supplemental Appropriations Act, passed in June 2009, stipulated that the Army should begin to accept and process RSLSP claims on 21 October 2009. This gave the Compensation and Entitlements Branch in the Office of the Deputy Chief of Staff, G–1, just 5 months to design a process for collecting, reviewing, and paying claims.

Determining Who Is Eligible

The Army faced a number of challenges before the RSLSP program officially began. The underlying issue was the very notion of stop-loss. From the Army's perspective, stop-loss was a force management tool, not a compensation tool. That is, tracking individual stop-loss for the purpose of future compensation was not of paramount importance.

G-1 worked to establish a list of "known" stop-loss Soldiers from the prescribed period to provide an estimate for Congress and a starting point for the Army's RSLSP program. While the "known" list proved to be reasonably accurate, it did not always provide precise information for determining the time an individual served in a stop-loss status. In response, the Army moved forward by establishing a special program management office to handle RSLSP claims.

Work at the RSLSP Program Management Office (PMO) began in earnest before the official launch date. The Army developed and launched a web-based e-file application for those eligible to submit claims and released

eligibility requirements through a number of media announcements and an All Army Activities message.

According to a G-1 fact sheet, those eligible include—

Service members, including members of the Reserve components and former and retired members who, at any time between 11 September 2001 and 30 September 2008, served on active duty while their enlistment or period of obligated service was extended or whose eligibility for retirement was suspended from one of the following:

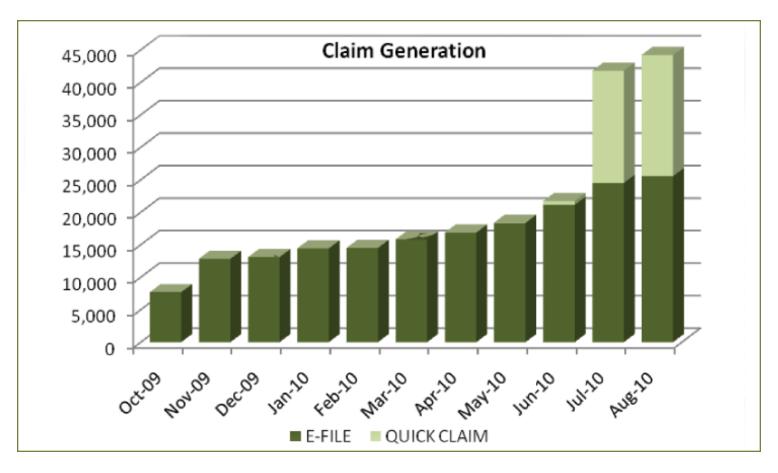
- □ Contractual expiration of term of service (ETS), expiration of active service (EAS), or Reserve end of current contract (RECC); or
- ☐ An approved separation date based on an unqualified resignation request or release from active duty (REFRAD) order; or
- ☐ An approved retirement based on length of service.

Service members who were discharged or released from the Armed Forces under other than honorable conditions are not permitted to receive retroactive stop-loss special pay.

The PMO established a case management team to begin reviewing and processing claims for payment. A number of issues have become apparent as case managers work to reconcile personnel records with an individual's claimed stop-loss period. Issues such as extensions, bonuses, and beneficiary status, along with other variables, complicate the adjudication process. As a result, in many instances, case managers work closely with claimants to develop and establish their stop-loss timeline.

Encouraging Claims

As the case management team worked to process claims, it became obvious that the Army faced a greater challenge than simply reviewing records. Over the first 2 months of the program, about 20,000 complete claims were filed. However, claim submissions dropped steeply over the next few months and the Army began the program's third quarter far short of the number of claims expected. Given the low claim totals,



the Army focused on identifying and notifying those eligible for the pay.

A number of obstacles complicated the process of notifying former Soldiers eligible for RSLSP. The program eligibility dates covered most of a decade, and many of those the Army needed to reach had been separated or retired for many years. The PMO developed a direct mail plan to send letters of notification to over 80,000 people on the known list directing them to apply for the special pay. To ensure the highest level of accuracy, the PMO conducted a comprehensive search to identify current addresses for all those on the known list and created an envelope and letter designed to elicit a response.

In addition to creating and sending the notifications, the PMO conceived a unique workflow to process applications through an automated web-based system known as the "quick claim" process. The chart above illustrates the impact on the number of claims of the direct mail campaign and the quick claim submission option. The quick claim process allows those receiving a letter to enter the system through a specified website to examine their stoploss dates as provided by the Army. The claimant then can choose to accept the Army's finding and be paid without submitting documentation or reject the Army's determination and file a new claim. Over 40 percent of those sent notifications have filed a

claim—the majority accepting the Army's determination of their stop-loss time.

The RSLSP PMO continues to work toward identifying and notifying those eligible for RSLSP. Along with the direct mail campaign, the Army has worked closely with the U.S. Department of Veterans Affairs and veteran and military service organizations to publicize the program. The PMO has also worked with the G–1 Public Affairs Office and Office of the Assistant Secretary of Defense for Public Affairs to establish a strong social media presence for the program. These combined efforts have generated over 55,000 claims as of August 2010. The deadline for submitting applications was 21 October 2010.

The Army has taken great care to ensure that the RSLSP program is a success. The requirement from Congress is to make certain that the money appropriated for this project reaches those for whom it is intended. The PMO strives to be diligent in adjudicating claims and has gone to great lengths to identify and notify those eligible. The continued success of the RSLSP program demonstrates the Army's dedication to Soldiers.

ROBERT PIDGEON IS THE DIRECTOR OF COMMUNICATIONS FOR THE RETROACTIVE STOP-LOSS SPECIAL PAY PROGRAM MANAGEMENT OFFICE, OFFICE OF THE DEPUTY CHIEF OF STAFF, G—1. HE HOLDS A MASTER OF MASS COMMUNICATION DEGREE FROM THE UNIVERSITY OF SOUTH CAROLINA.



Where Are We Going? The Future of Joint Logistics

BY MAJOR ROBERT P. MANN

umerous reports from many organizations have discussed the inefficiency of the military logistics system. In response to these reports, the Department of Defense (DOD) has undertaken many initiatives to create a logistics system that is both more responsive and more effective in supporting a joint force commander. Creating such a system will become more important in the future since we can expect a decrease in DOD funding to 3.5 percent of the gross domestic product. A discussion among professional logisticians about these initiatives is needed in order to identify possible solutions.

I believe that achieving the goal of a joint logistics system requires the establishment of a new functional command. To accomplish this, the current supply system will have to be overhauled and service parochialism will have to be overcome. Some would say that this will violate Title 10 of the U.S. Code, which establishes the roles and missions of the Armed Forces. However, the new functional command would be paid for by each military service for the service (supply chain management) provided.

Confusion Over Defining Terms

After receiving a briefing on the draft Joint Supply Joint Integrating Concept from the Defense Logistics Agency (DLA), I understand the requirement to create one supply process owner for DOD.² This requirement is in line with the best business practices of the private sector and is the linchpin in creating a factory-to-foxhole supply chain.³

The executive summary of Joint Publication (JP) 4–0, Joint Logistics, states, "Supply chain management synchronizes the processes, resources, and efforts of key global providers to meet CCDR [combatant commander] requirements." This appears to be in conflict with the September 2003 designation of the U.S. Transportation Command (TRANSCOM) as the distribution process owner for DOD. On its website, TRANSCOM states that it is to serve "as the single entity to direct and supervise execution of the strategic distribution system" in order to "improve the overall efficiency and interoperability of distribution related activities—deployment, sustainment and redeployment support during peace and war." The "sustainment" portion of this is at least a part of supply chain management.

This becomes very confusing when the definitions of distribution and supply chain management are put together. DOD defines distribution as the "operational process of synchronizing all elements of the logistic system to deliver the 'right things' to the 'right place' at the 'right time' to support the geographic combatant commander." DOD defines supply chain management as "a cross-functional approach to procuring, producing, and delivering products and services to customers. The broad management scope includes sub-suppliers, suppliers, internal information, and funds flow." Thus distribution and supply chain management both share the concept of delivering supplies to someone.

¹Current DOD funding is approximately 4.8 percent. Davis S. Welch, Director of Investment for the Deputy Assistant Secretary of the Army for Budget, Army Command and General Staff College Futures Day Panel, Fort Leavenworth, Kansas, 29 October 2009.

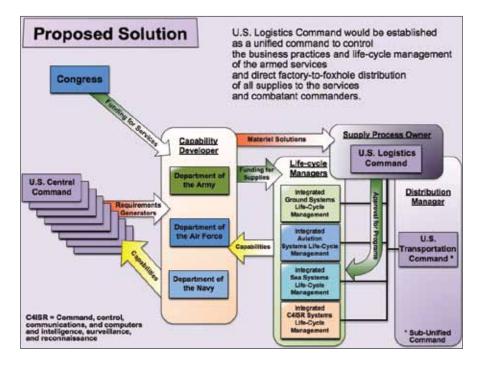
²Colonel Martin Binder, Defense Logistics Agency J–314, Joint Supply Joint Integrating Concept Presentation to Army Command and General Staff College, Fort Leavenworth, Kansas, 22 October 2009.

³Supply chain: 1) starting with unprocessed raw materials and ending with the final customer using the finished goods, the supply chain links many companies together. 2) the material and informational interchanges in the logistical process stretching from acquisition of raw materials to delivery of finished products to the end user. All vendors, service providers, and customers are links in the supply chain. Council of Supply Chain Management Professionals, *Glossary of Terms*, http://cscmp.org/digital/glossary/glossary.asp, accessed 23 October 2009.

⁴Introduction to JP 4–0, Joint Logistics, Joint Chiefs of Staff, Washington, DC, 18 July 2008, p. x.

⁵ JP 1–02, Department of Defense Dictionary of Military and Associated Terms, Joint Chiefs of Staff, Washington, DC, 12 April 2001, as amended through 31 October 2009, p. 167.

⁶Ibid., p. 524.



It appears that DOD is looking for a supply chain supported by a distribution system to sustain joint force commanders. For the purpose of this article, I will modify the DOD supply chain management definition as follows: Supply chain management is a cross-functional approach to procuring, producing, and delivering the right things to the right place at the right time to customers. The broad management scope includes subsuppliers, suppliers, internal information, and funds flow.⁷

This definition addresses the goal of trying to achieve the "perfect order." It also deletes "delivering services" because that term implies tasks more associated with force structure than with delivering a commodity.

A Supply Process Owner: USLOGCOM

Defining the DOD supply system as a supply chain leads to the assumption that there should be one supply chain manager in order to conform to the best business practices. So, a four-star organization should be responsible for leading supply chain management. This joint organization should have a formal, approved structure with representatives from each service and not be a bureau or board of the Joint Staff. It should oversee all aspects of equipment and supplies, from development through disposal.

The establishment of a U.S. Logistics Command (USLOGCOM) is one approach to this organization.

(See chart at left.) This would be a functional command and part of the Unified Command Plan, USLOG-COM's mission would be to control the business practices and life-cycle management of the services and to direct distribution of all supplies to the services and the combatant commanders. USLOGCOM would have two major components: TRANS-COM, which would be a subunified command, responsible for distribution as defined in JP 1-02, Department of Defense Dictionary of Military and Associated Terms, and integrated life-cycle managers (ILMs), who would provide the supplies for TRANSCOM to deliver what is needed rather than what is on hand.

The ILMs could be organized into functional groups (ground, air, sea, and C4ISR [command, control,

communications, computers, intelligence, surveillance, and reconnaissance]) rather than by component (Army, Marine Corps, Navy, and Air Force) to gain efficiencies in management and oversight as well as provide a structure that would result in increased interoperability across the services. For instance, if all command and control and automated systems were developed in one organization, that organization could provide a common architecture and common components that would assist in networking and maintenance operations.

USLOGCOM would receive input from a service when that service had identified a materiel shortfall. The service would pass the requirements, whether new or existing, to USLOGCOM, which then would develop the materiel solution and provide the cost to the service. The service then would have to seek or provide funding in order to continue with the development and production of the equipment. If the materiel solution existed, the ILMs would identify the source of supply and provide it to the service for a fee. The ILMs would be required to manage the entire life-cycle of the equipment, including the procurement and management of repair parts. This would create a single interface between suppliers and customers.

As the single interface, the ILMs would be the supply chain managers for their commodities, analyzing

⁷This definition is in line with the definition of supply chain management (SCM) by the Council of Supply Chain Management Professionals: "Supply Chain Management encompasses the planning and management of all activities involved in sourcing and procurement, conversion, and all logistics management activities. Importantly, it also includes coordination and collaboration with channel partners, which can be suppliers, intermediaries, third-party service providers, and customers. In essence, supply chain management integrates supply and demand management within and across companies. Supply Chain Management is an integrating function with primary responsibility for linking major business functions and business processes within and across companies into a cohesive and high-performing business model. It includes all of the logistics management activities noted above, as well as manufacturing operations, and it drives coordination of processes and activities with and across marketing, sales, product design, finance and information technology." Council of Supply Chain Management Professionals, *Glossary of Terms*, http://cscmp.org/digital/glossary/glossary.asp, accessed 23 October 2009.

⁸Binder, 22 October 2009.

demands from across DOD and then programming replenishment or replacement from suppliers. The ILMs would need the ability to shift DOD stocks as needed to meet requirements. This would require an accurate common operational picture (COP) so the ILMs could make accurate decisions on sourcing solutions. The COP would have to extend from the suppliers' sources of supply down to the end users in order to anticipate requirements and shortfalls.

TRANSCOM would be responsible for delivering supplies through the supply chain to the services and supported commanders. Realistically, this responsibility would not extend to the "foxhole." It is unrealistic to hold USLOGCOM and TRANSCOM responsible for delivering directly to the foxhole without giving them the capability to control the organic distribution of assets at all echelons. This is a topic that should be addressed separately, though it is realistic to expect the joint force commander to designate a location where the transfer of responsibility and accountability occurs as far forward as possible.

TRANSCOM and the supported commanders would be required to establish in-transit visibility all the way to the foxhole. This would enable USLOG-COM and the ILMs to "see" where supplies were located en route so they could make accurate decisions about where to direct shipments as priorities and requirements change. This would feed the ILMs' COP.

Improving Logistics Infrastructure

DOD should continue to upgrade the logistics automation infrastructure. The upgrade of DLA national-level systems and the introduction of a joint, Army, Marine Corps, Navy, and Air Force Global Combat Support System (GCSS) would benefit all logisticians at all levels. This would give the services and item managers the ability to maintain visibility of supplies more efficiently and effectively. While program manager briefings and websites discuss the projected capabilities of GCSS, one thing must happen in order to create a supply chain: All systems must be able to communicate and share data so the ILMs can have visibility from the factory to the foxhole.

For USLOGCOM to have the ability to direct the transfer of equipment and supplies among organizations and services, financial management systems must be integrated into GCSS. When a requisition is placed into the supply system, the best source of supply must be identified. For example, if an Air Force engineer unit operating in theater orders a part for a high-mobility multipurpose wheeled vehicle, the item manager must be able to direct that a colocated Army, Marine Corps, or Navy supply support activity fill the request automatically (based on the establishment of support relationships and a referral system based on a joint concept of support).

Can We Overcome Parochialism?

To be able to implement change, DOD must be a learning organization and overcome service and functional parochialism. It will be hard for a commander at most, if not all, levels to trust another organization to provide supply chain management and allow it to move supplies within and from his organization. It will take time for the supported organizations to trust and truly embrace supply chain management. It will also take leaders who understand that this change will allow us to more efficiently use our resources, which will become constrained in the future.

To achieve this trust more quickly, we must look at the professional development of the individuals charged with operating a global supply chain. I believe that logisticians from across the services must be grounded in the doctrine that supports their force. All logisticians should train in joint operations and joint logistics during their company-grade professional military education. For the Army, this would give logisticians operating in the echelons above brigade an understanding of how and why they support joint forces.

An additional step toward giving the supported commanders confidence in this process is to create supply chain manager career professional positions within DOD. This could be done as simply as creating an additional skill identifier or a separate functional area. These logisticians should be required to earn an advanced degree in supply chain management and achieve accredited status with a professional supply chain management organization, such as the Institute for Supply Management or SOLE—The International Society of Logistics. Certification must be required to ensure that the correct person is placed in supply chain manager positions. This would enable USLOGCOM to maintain the best business practices and realize the greatest efficiencies.

DOD must be prepared to adopt better practices in supporting the warfighter as we face a future with reduced budgets and constrained resources. A reorganization to create a supply process owner supported by a distribution process owner would incur a short-term cost, but it would achieve an increase in effectiveness and efficiency over the long term by following best business practices. The creation of a unified command that supports the services and the joint force commander would not require an act of Congress and could be done by overcoming service cultures. Driven from the top, this change would be accepted across DOD and would be beneficial for all.

Major Robert P. Mann is an organizational integrator in the Office of the Deputy Chief of Staff, G—3/5/7, Department of the Army. He wrote this article while attending the Army Command and General Staff College. He is a graduate of the Quartermaster Officer Basic Course, the Combined Logistics Officers Advanced Course, and the Logistics Executive Development Course.

Bulk Petroleum Manning Requirements in an ESC

BY CAPTAIN SHARI S. BOWEN

he 3d Sustainment Command (Expeditionary) (3d ESC) has recommended that the Army Combined Arms Support Command change the manning authorizations of the bulk petroleum section of the ESC's supply and services branch. The ESC made this request because its modification table of organization and equipment (MTOE) does not adequately correspond to its operational demands.

During Operation Iraqi Freedom, the 3d ESC's class IIIB (bulk petroleum) section operated under the doctrinal requirements for a theater sustainment command petroleum section. It was responsible for planning, synchronizing, and coordinating all external fuel support through the command and control of five sustainment brigades, managing fuel distribution in Iraq by balancing the existing distribution capabilities to meet current and projected operational requirements, and ultimately providing up to 2 million gallons of bulk petroleum daily to deployed units.

The ESC's bulk petroleum team coordinated daily with the mobility sections, the movement control battalion, the sustainment brigades, the sub-area petroleum officer (forward), the U.S. Central Command (CENTCOM) Joint Petroleum Office, the Multi-National Corps-Iraq C-4, the Defense Energy Support Center, and several other fuel-community entities. This ensured the continuity of fuel distribution and management.

The section was also responsible for conducting site visits to ensure that accurate procedures were being followed at the bulk petroleum farms throughout Iraq. Personnel had to be on site when required by the ESC support operations officer, the commanding general, and on occasion, at the specific request of the CENTCOM joint petroleum officer to guarantee petroleum operations were conducted suitably.

Simultaneously, construction of bolted-steel tank facilities was in progress at two of the direct support locations, Joint Base Balad and Contingency Operating Base (COB) Speicher. The projects required visits from a subject-matter expert from the bulk petroleum section who could fully understand the proposed construction and ensure that it would be sufficient for bulk fuel farm operations. The projects also kept the section engaged with Logistics Civil Augmentation Program contractors to ensure that the mission was completed with the desired equipment. This mission later included overseeing construction of a bulk fuel farm at COB Basra that supported Multi-National Division-South as it moved its headquarters.

Other requirements that reduced staff availability in the bulk petroleum section were obligations to participate in the annual fuels conference and rest and recuperation leave. To reduce some burden on the section, bulk water duties were shifted to the class I (subsistence) section since water production and consumption fell under the class I realm of responsibility.

According to the MTOE, the ESC's bulk petroleum section staff should include a captain as the petroleum officer, a sergeant first class as the petroleum supply sergeant, and a staff sergeant as a water treatment supervisor. The MTOE also calls for a major to be the supply management officer; however, in the MTOE this position belongs to the supply and services branch and not directly to the bulk petroleum section.

Because of the size of the area of responsibility and the number of forces being supported in Iraq, the force authorized to the section by the MTOE was inadequate for success. The ESC's bulk petroleum section assumed additional personnel, including a warrant officer petroleum technician, who by the MTOE was assigned to the distribution integrations branch.

The branch had been established within the support operations section to synchronize requirements between the commodities and their final destinations. However, the ESC found that having the subject-matter experts in the distribution integrations branch instead of assigned to specified commodities had disadvantages. The bulk petroleum section also received automated logistical specialist Soldiers, in the ranks of sergeant first class and staff sergeant, from other sections to guarantee success.

The vast number of daily missions proved to require a lieutenant colonel, a major, a captain, a petroleum technician, and four petroleum supply specialists (one master sergeant, two sergeants first class, and one staff sergeant) to successfully achieve the bulk petroleum mission. I propose that before any more ESCs perform expeditionary missions, their MTOEs be changed to ensure that the distribution of fuel, the most critical supply commodity, is not interrupted.

CAPTAIN SHARI S. BOWEN WAS THE PETROLEUM SUPPLY OFFICER IN CHARGE OF THE CLASS III (BULK PETROLEUM) SECTION OF THE 3D SUSTAINMENT COMMAND (EXPEDITIONARY) WHEN SHE WROTE THIS ARTICLE. SHE HOLDS A BACHELOR'S DEGREE IN ENGLISH FROM THE UNIVERSITY OF MARYLAND AND A MASTER'S DEGREE IN INSTRUCTIONAL TECHNOLOGY FROM AMERICAN INTERCONTINENTAL UNIVERSITY AND IS PURSUING A DOCTORATE OF MANAGEMENT IN ORGANIZATIONAL LEADERSHIP FROM THE UNIVERSITY OF PHOENIX. SHE IS A GRADUATE OF THE QUARTERMASTER OFFICER BASIC COURSE.

Expediting Class IX Deliveries in Iraq

BY FIRST LIEUTENANT ALEXYS M. MYERS

he flow of class IX (repair parts) is an integral part of the maintenance process. Without parts, faults will not get fixed. The longer it takes a repair part to arrive, the longer a piece of equipment is not mission capable (NMC).

My brigade was located at Forward Operating Base (FOB) Marez in Mosul, Iraq. Mosul is located in northern Iraq, approximately 172 miles from Logistics Support Area Anaconda in Balad, Iraq, and 560 miles from Kuwait. These two bases are hubs for class IX. Most parts either come from or go through these locations.

The average amount of time it takes for a part to come from Kuwait is 24 days, and the average amount of time it takes for a part to arrive from Balad is 14 days. This has had an enormous effect on our combat power. On average, NMC equipment remains that way for more than 20 days because of the sluggish flow of class IX parts.

Several things can be done to help mitigate this slow flow of repair parts.

ONE REASON IT TAKES PARTS
SO LONG TO GET FROM BALAD
TO MOSUL IS THAT THE UNITS
THAT PACK THE CONTAINERS
GOING TO SPECIFIC FOBS
WAIT UNTIL A CONTAINER
IS COMPLETELY FULL OF
PARTS BEFORE SENDING THE
CONTAINER NORTH.

Share Among Units

The easiest way to speed up to the flow of class IX in Iraq is to use unit resources. Every battalion maintenance program has a battalion maintenance technician. This warrant officer usually has many resources available to him because the Warrant Officer Corps is very tightly knit.

The 026 report (Equipment Deadlined Over XX Days by Battalion Report) with the entire brigade's list of NMC equipment is emailed to every battalion. Each battalion maintenance technician should read the entire list to ensure that he does not have a part that a sister unit needs. If he does have a part that another unit needs, he should hand-carry or mail it to that unit. When units within the brigade look out for each other, they tend to have smaller 026 reports.

Hi-Pri

Other solutions to this issue have gone up our brigade's channels to brigade. One solution that the support operations shop uses is called a "hi-pri" (high priority). Our brigade standard is to do a hi-pri if the estimated shipping date on the initial document exceeds 6 months.

At that point, the battalion maintenance clerk conducts research to identify the supply support activity (SSA) that has the part. This information is passed from the battalion maintenance technician through the materiel officer and the SSA technician to the routing code geographic manager, who will then call up the SSA technician at the location of the part and do a requisition.

Ordering a part hi-pri is similar to doing a walkthrough at an SSA external to the unit. (Note: If a part is not located in any external SSAs in country, then the brigade will not mark the document as hi-pri.)

Liaison Officer

Arguably the best solution to the slow receipt of repair parts is to keep a liaison officer (LNO) at the hub location. My brigade's LNO was located in Balad. This LNO should be a noncommissioned officer or officer who knows and understands the supply system. He would be responsible for mailing parts to the battalions in the brigade spread across Iraq.

One reason it takes parts so long to get from Balad to Mosul is that the units that pack the containers going to specific FOBs wait until a container is completely full of parts before sending the container north. (It is a waste of resources to ship a half-empty container.) With an LNO, however, parts can be walked through the hub SSA in Balad and mailed directly to a point of contact at the receiving unit. This process undoubtedly expedites the flow of class IX parts in Iraq. An LNO should definitely be used by all units.

The flow of class IX parts can be incredibly slow in Iraq. However, many solutions are available to help mitigate this problem. Before deploying, consider that this might be an issue and think of ways to help your unit. Maintaining equipment is an extremely important part of mission success, and maintenance is incomplete without class IX parts.

First Lieutenant Alexys M. Myers is the maintenance control officer for the 1st Battalion, 9th Field Artillery Regiment, 2d Heavy Brigade Combat Team, 3d Infantry Division. She was deployed to Iraq when she wrote this article. She holds a bachelor's degree in French and Spanish from the United States Military Academy.

A Day in the Life of a DA Logistics Intern

BY ALISON SILVERIO AND SUSANNAH TOBEY

epartment of the Army (DA) logistics interns never know what tasks may make up their training day. One minute they may be working at a desk, and the next minute they could be riding in a Bradley infantry fighting vehicle or jumping out of an airplane. No matter what daily tasks they undertake, they are gaining valuable hands-on experience while learning more about their customer—the Soldier.

We are DA logistics management specialist interns who were assigned to Yuma Proving Ground, Arizona, as part of our on-the-job training (OJT). During our OJT, we received logistics training in supply, maintenance, and transportation. On 3 February 2010, we also participated in a tandem jump at the Military Freefall School located at Yuma Proving Ground. The Military Freefall School, part of the Army John F. Kennedy Special Warfare Center and School, is a joint forces facility and the premier training site for high altitude-low opening (HALO) parachuting techniques. This is where U.S. Special Operations Forces personnel go to qualify as high-altitude parachutists.

WE OBSERVED SOLDIERS
WHO HAD NEVER JUMPED
BEFORE PROGRESS TO BEING
ABLE TO JUMP WITH A GROUP
OF 7 OR 8 OTHERS FROM
12,500 FEET, AT NIGHT,
WITH A WEAPON AND
COMBAT PACK.

Before heading to Arizona for actual airtime, Soldiers begin classes at Fort Bragg, North Carolina. In the first week, they learn how to pack a parachute, rig extra equipment, and "fly" in a vertical wind tunnel. This wind tunnel teaches them the proper body position that is needed for freefall and the basics of parachute canopy control.

Having learned the basic techniques, they head to Yuma Proving Ground for more training, which includes actual airtime. Each instructor is responsible for two students who are relatively close in body type to his own. While gravity affects everything at the same rate, different body types fall faster than others based on their weight and exposed surface area.

For Soldiers, the training culminates in the fourth week with a freefall simulating a combat mission. We observed Soldiers who had never jumped before progress to being able to jump with a group of 7 or 8 others from 12,500 feet, at night, with a weapon and combat pack. Once the Soldiers opened their parachutes, they flew in a formation and landed together—just as they would in combat.

After observing the Soldiers jump, we jumped in tandem with instructors. We used the same gear, signals, and techniques that the Soldiers normally do but in a tandem mode. Since we were up to it, the instructors made the jump a little more challenging by doing a backwards flip after they were out of the airplane.

For over a minute, we were in the freefall position, with our arms out and our legs bent up, to create an even surface against the force of the wind pushing against us. At about 6,000 feet, the tandem jumpmasters pulled the chute, and we were able to gently fall while taking in a great panoramic view of the beautiful mountains and desert landscape that make up Yuma Proving Ground.

We landed safely, and although we had been apprehensive about jumping out of an airplane, we agreed that it was the most adventurous and exciting experience we had ever had. The tandem jump gave us a closer look at and a greater appreciation for the world of Special Operations Forces.

This is just one example of a DA logistics intern's experience. More information on the DA Logistics Intern Program is available on the Civilian Logistics Career Management Office (CLCMO) website at http://www.cascom.lee.army.mil/CLCMO/ or by contacting the CLCMO office at linda.sawvell@us.army.mil or by phone at (309) 782–7986.

ALISON SILVERIO IS A DEPARTMENT OF THE ARMY (DA) LOGISTICS MANAGEMENT SPECIALIST INTERN. SHE HOLDS A BACHELOR'S DEGREE IN PUBLIC ADMINISTRATION WITH A MINOR IN SPANISH FROM VIRGINIA STATE UNIVERSITY. SHE IS A GRADUATE OF THE INTERN LOGISTICS STUDIES PROGRAM AND IS CURRENTLY WORKING ON A DEFENSE ACQUISITION UNIVERSITY (DAU) LEVEL 1 CERTIFICATION.

Susannah Tobey is DA logistics management specialist intern. She holds a bachelor's degree in international business and Russian from the University of Wyoming. She is a graduate of the Intern Logistics Studies Program and is currently pursuing a DAU Level 1 certification.

1st Infantry Division Recognizes Benefits of Logistics Reporting Tool

BY SERGEANT BENJAMIN KIBBEY, USAR

he Army is implementing a revolutionary system that allows commanders and logistics Soldiers at all levels to see in real time what they have and where they have it. The Logistics Reporting Tool (LRT) can track everything from bottled water to missiles and nonstandard equipment (such as sport utility vehicles) to barracks occupancy. Software developers refined the tool around the needs of logisticians (as defined by them) and delivered solutions to fit those needs.

The effort to have LRT widely embraced by the Army is being spearheaded by the 1st Infantry Division G–3 in Iraq. The section began the effort by coordinating with both the 36th Sustainment Brigade, which was responsible for logistics throughout southern Iraq when the "Big Red One" came to the theater, and the 13th Expeditionary Sustainment Command (ESC), which was the theater-level logistics command. The 1st Infantry Division assumed command and control of U.S. Division-South on 1 February 2010, and in March, Captain David Shaffer began working to put LRT into use by the division and its subordinate units in theater.

LRT is a small part of the Battle Command Sustainment Support System (BCS3), which has had mixed reviews because of experiences Soldiers had with the earlier, unrefined version of the system. BCS3 is now managed by the Boeing subsidiary Tapestry Solutions, Inc., and it is a far cry from the software most Soldiers remember. However, convincing Soldiers of this has been a bit of a battle, according to Shaffer.

Initially, Shaffer was also skeptical because of an encounter he had with an earlier version of BCS3 in 2006. Shortly after taking on the project, he called Larry Wise, a field service engineer (FSE) for Tapestry Solutions, Inc., and a retired Army command sergeant major. According to the two, their first meeting was the result of a "heated discussion" and a challenge from Wise for Shaffer to visit Contingency Operating Base Adder to have some of his perceptions corrected.

Once Wise had the chance to walk Shaffer, an experienced logistician, through the tremendous functionality the program offered, Shaffer became an LRT believer. Shaffer, Wise, and every ally they could find then worked to gain acceptance of LRT. The key to progress came from working directly with the logisticians who needed to use the software. "You get them in there, and you get them to stop thinking about everything they don't want to do and get them looking at what they need to do," Wise said.

Chief Warrant Officer Kristie-Marie Dean, the sustainment automation support management chief for the

36th Sustainment Brigade, said that the current LRT is notably different from the original software. "It's more functional, easier to put it online, [does] not [have] so many steps, [is] more user-friendly, and uses terms that deal more with military terms and not civilian terms," said Dean.

Colonel Sean Ryan, the 36th Sustainment Brigade commander, is familiar with the issues Shaffer and Wise encountered. As a civilian, Ryan works with the implementation of software in corporate environments. When he first encountered the LRT during the 36th Sustainment Brigade's mobilization, Ryan immediately saw the usefulness of the program. "I had to do a lot of convincing that we were going to do this," Ryan said. "Having [Shaffer] come in, and having that support from the division, gave me the momentum that I needed to push it forward."

Ryan noted that he knows from experience that any software is going to have issues when it is first fielded. The only answer is to get into the program and identify the bugs. "We've spent millions of dollars to field these systems, and I just felt it was my duty to do a proof of concept to start really understanding how to utilize it [and] figure out what the true shortfalls are."

Greg Miller, a retired logistics sergeant major and the BCS3 FSE embedded with the 13th ESC, said the LRT has come a long way from the original system introduced in 2004. "It's an outstanding tool," Miller said. "It starts from the bottom end with the user, and as soon as the user inputs, everybody can see it." The information entered at the field level is viewable all the way back in the United States only seconds later, giving commanders at all levels an immediate and realistic picture of what is on the ground.

Miller said LRT also saves time and effort and puts logisticians back to work doing logistics work instead of PowerPoint slides and Excel spreadsheets. "Depending on the level of the unit, the units probably spend 3 to 4 or more man-hours per day collecting their reports," Miller said. "That's 28 man-hours [a week]; that's a half a person that you've given back to the unit."

"It's going to free-up a lot of time for Soldiers," said Chief Warrant Officer Dean. "It's going to take the time down below to enter the data, but once that data is entered, it just becomes a logistical tool for us to analyze."

Sergeant Benjamin Kibbey, USAR, is a member of the 367th Mobile Public Affairs Detachment, Army Reserve. He was assigned to Multi-National Division-South in Iraq when he wrote this article.

HEADLINES

Chief of Staff Emphasizes Importance of Property Accountability

The Chief of Staff of the Army, General George W. Casey, Jr., has directed that a property accountability campaign be conducted to ensure that a culture of good supply discipline and property accountability exits across the Army at every level. The Chief of Staff charged the Deputy Chief of Staff, G–4, Department of the Army, with developing an enduring campaign.

In his message establishing the campaign, General Casey stated, "Property accountability is every commander's responsibility. As we focus on executing the Iraq drawdown and build-up in Afghanistan, as well as continued deployments worldwide, it is imperative that we maintain good accountability of all Army property. We must know what we have and where it is—without exception."

The key tasks of the campaign are to—

- ☐ Reinforce existing policies and directives with subordinates.
- Reestablish commanders' organization inspection programs.
- ☐ Mentor leaders at every level on good supply discipline and property accountability.
- □ Redistribute or turn in excess materiel.
- ☐ Establish mechanisms to monitor compliance with good supply procedures.

The desired goal is for all Army property to be accounted for, excess property to be turned in and redistributed to improve readiness, and programs to be in place to inspect and monitor compliance.

For more information on the property accountability campaign, visit https://forums.bcks.army.mil/Community Browser.aspx?id=1143486.

Interagency Logistics Symposium Highlights Disaster Relief Support

The biennial Interagency Logistics Symposium, held in June at the U.S. Transportation Command (TRANS-COM) headquarters at Scott Air Force Base, Illinois, focused on logistics related to humanitarian assistance and disaster relief efforts. Participants included more than 140 individuals from 50 organizations, including Government and nongovernmental agencies, combatant commands, industry, and academia.

Personnel of the U.S. Southern Command, the U.S. Agency for International Development, the Federal Emergency Management Agency, and the U.S. Embassy in Haiti discussed their experiences and lessons learned in responding to the devastating January earthquake in Haiti.

The symposium also featured a supply-chain modeling and simulation exercise that used a shared-workspace capability called the Small Group Scenario Trainer (SGST). Attendees played the roles of different

stakeholders confronted with a disaster scenario borrowed from the Military Sealift Command's Sealift 2010 exercise and used SGST to plan and execute a coordinated interagency response.

"The event was very informative and provided a unique opportunity to understand interagency challenges," observed Adam Yearwood, assistant for sealift and mobility, Office of the Deputy Assistant Secretary of Defense for Transportation Policy. "A key take-away is that we need to improve collaboration between all stakeholders."

New Strategy Will Guide Acquisition of Tactical Wheeled Vehicles

The Army has sent to Congress a report detailing an acquisition strategy for tactical wheeled vehicles, including mine-resistant ambush-protected vehicles, through 2025.

According to the report, "Finding the right balance and mix of [tactical wheeled vehicles] requires the Army to continually assess and adjust investments. Managing this fleet effectively goes beyond simply buying new vehicles as the existing vehicles age beyond their useful life. We will use a combination of new procurement, repair (sustainment), recapitalization (recap), and divesture to achieve our strategic objective by addressing the readiness and mission issues of the fleet."

The acquisition strategy calls for sustainment and recapitalization of 50,000 up-armored high-mobility multipurpose wheeled vehicles (HMMWVs) and the divestiture of up to 50,000 aging HMMWVs, which will be replaced by new joint light tactical vehicles.

The Army will also continue to buy new trucks in the family of medium tactical vehicles, while 44,000 trucks will be sustained through reset and up to 28,000 aging trucks will be retired or divested. The strategy calls for divestiture of all M35 2½-ton trucks by the end of fiscal year 2011.

The report outlines a long-term armor strategy under which tactical trucks will be built using an A-kit/B-kit modular armor approach. This approach will meet the need to protect trucks on nonlinear battlefields where all vehicles are now targets of enemy fire and improvised explosive devices. The A-kit/B-kit approach will allow protection of trucks to be adjusted according to the potential threats they will face.

As the report describes the approach, "The A-kit is designed to accept additional armor in the form of a B-kit. The A-kit/B-kit concept allows the Army flexibility in several areas: the armor B-kit can be taken off when not needed—reducing unnecessary wear and tear on the vehicles; the Army can continue to pursue upgrades in armor protection—adapting B-kits to match the threat; and the versatility of the B-kit



Army Receives First Palletized Load System A1s

In August, the Army received its first shipment of the palletized load system (PLS) A1s from Oshkosh Defense, a division of the Oshkosh Corporation. The vehicles feature design improvements that make it more secure and robust than its predecessor. The Army is slated to receive 725 PLS A1s by September 2011. (Photo by Oshkosh Defense)

enables the transfer of armor from unit to unit [which] makes armor requirements affordable by pooling assets versus buying armor that is only for one vehicle."

The overall tactical wheeled vehicle acquisition strategy is designed to provide maximum flexibility to respond to changes in combat circumstances, incorporate technological changes, and buy newer materials.

Airdrops in Afghanistan Break Records

Airdrop missions in Afghanistan continue to break records as more U.S. units arrive in the country. In spite of communication glitches and other problems encountered on these missions, during a 12-week period early this year, 500 bundles totaling 450 tons were dropped each week.

In April, units set a record with the delivery of more than 2,700 bundles. On 7 April, units set a single-day record of 200 bundles, totaling 160 tons of supplies delivered. For comparison, during the December 1944 Battle of the Bulge in World War II, 482 tons of supplies were dropped in a 2-day period. In Vietnam, during the battle of Khe Sahn, 294 tons were dropped in a 77-day period.

According to Air Force Colonel Keith Boone, who has managed Afghanistan airdrops since last year, airport rates "have been steadily increasing since sustainment airdrop operations began in 2005." Boone says that this makes the mission in Afghanistan the longest aerial delivery mission in the history of military

operations. "With the exception of about 5 days, we have had at least 1 drop every day since I have been here, and I suspect that is true for the past 2 years."

"Lots of great innovations [are] happening in theater," said Air Force Brigadier General Barbara Faulkenberry, who recently served as director of mobility forces and commander of the Air Mobility Command's 15th Expeditionary Mobility Task Force. "The end result is we're providing what the warfighter needs, when he needs it, and where he needs it."

Among those innovations are the joint precision airdrop system (JPADS), the improved container delivery system (ICDS), and the most recent development, the C-130-based "low-cost, low-altitude" (LCLA) combat airdrop used to resupply Soldiers at forward operating bases.

JPADS uses a global positioning system, steerable parachutes, and an onboard computer to guide loads to a designated point on a drop zone. It integrates the Army's precision and extended glide airdrop system and the Air Force's precision airdrop system program. ICDS allows for improved precision by factoring in altitude, wind speed, wind direction, terrain and other circumstances that might affect the drop. A low-cost, low-altitude airdrop is accomplished by dropping bundles weighing 80 to 500 pounds, with pre-packed expendable parachutes, in groups of up to four bundles per pass.

"The LCLA drops will meet the needs of a smaller subset of the units," Boone said. "This is a significant

step forward in our ability to sustain those engaged in counterinsurgency operations throughout Afghanistan."

Aircraft that land and offload supplies will continue to be the main method of supplying Soldiers, according to Boone. But where this type of operation is not possible, supplies will be delivered through container delivery system airdrops.

U.S. Central Command Combined Air and Space Operations Center officials say 97 percent of airdrops have been on target as of July 2010.

"Tactical airlift has never been so responsive, so agile in our [tactics, techniques and procedures], and critical in a fight," Faulkenberry said. "Airdrop is enabling the small, dispersed [counterinsurgency] unit to engage and operate. This April, we dropped 4,860,000 pounds to ground forces who needed the food, fuel, or ammo. It is taking air-ground teamwork to succeed, and together, we're making our history."

UPCOMING EVENTS

Defense Working Group on Nondestructive Testing

The 58th Defense Working Group on Nondestructive Testing (DWGNDT) will meet from 7 to 9 December in Fort Worth, Texas. This year's event is hosted by the Air Force Nondestructive Inspection Program Office at Tinker Air Force Base, Oklahoma.

The DWGNDT is a meeting of engineers, scientists, technicians, and managers from U.S. commands and Government activities responsible for the development and application of nondestructive testing methods in research, engineering, maintenance, and quality assurance. All participants must be U.S. citizens. For more information or to register, visit the DWGNDT website at www.dwgndt.org.

Defense Logistics and Defense Logistics Medical

This year, Worldwide Business Research will hold its Defense Logistics Medical conference as part of Defense Logistics 2010 from 30 November to 3 December in Arlington, Virginia.

The focus of Defense Logistics Medical is the improvement of medical logistics processes to ensure timely delivery of medical support to the warfighter. The conference will highlight cold-chain storage and transportation and end-to-end supply chain management challenges for the Army, Marine Corps, and Navy communities.

Defense Logistics will concentrate on adapting to a new budget environment without sacrificing support to the warfighter. For more information or to register, visit the conference website, www.defenselog.com.

RECENTLY PUBLISHED

Army Training and Doctrine Command (TRA-DOC) Pamphlet 525–3–1, The United States Army Operating Concept, published in August, explains how to comply with and execute guidance from the Army Capstone Concept. The pamphlet serves as a bridge between the capstone concept and the warfighting functional concepts. It will also guide revisions to Army doctrine, organization, training, materiel, leadership and education, personnel, and facilities (DOTMLPF) from 2016 to 2028. These changes will be needed in order for the Army to function in a challenging environment with joint, interagency, intergovernmental, and multinational partners, who will be key players in future warfare.

The pamphlet is available at the TRADOC website at www.tradoc.army.mil/tpubs/pams/tp525-3-1.pdf.

Army Holds First Mobility Systems Conference

More than 280 attendees took part in the Army's first mobility systems conference, held from 5 to 7 April in Newport News, Virginia. The Army product managers (PMs) for transportation information systems, joint-automatic identification technology, and the Movement Tracking System and the product director of the Battle Command Sustainment Support System (BCS3) cosponsored the event, which provided a venue for discussion and collaboration on product connectivity and system commonalities.

Seventy-five percent of the participants were from the user community and received an end-to-end demonstration of information flow between the transportation coordinators. A panel discussion on current operations in Afghanistan was also held, along with workshops on air movement request procedures, automatic movement flow tracking in-transit visibility, BCS3 training simulation, the Cargo Movement Operations System, and other subjects.

Environmental Hotline Established for Army Aviation and Missile Command

The Army Aviation and Missile Command (AMCOM) has created a hotline to answer questions about environmental issues. The hotline staff can identify currently approved substitute materials and provide expertise in depot maintenance work requirements and information on technical manuals and processes.

The hotline was put in place to resolve issues pertaining to obsolete products, hazardous material alternatives, regulatory guidance, and alternative technologies to reduce the environmental burden on AMCOM maintenance organizations. The AMCOM

Environmental Hotline is available 24 hours a day, 7 days a week, and can be reached by calling (256) 424–1711 or by sending an email to amcomenvironmental@conus.army.mil.

Army Responds to Floods in Pakistan

The Department of Defense announced on 27 August that 10 CH-47 Chinook and 8 UH-60 Black Hawk helicopters from the 16th Combat Aviation Brigade in Fort Wainwright, Alaska, were joining relief efforts to aid flood victims in Pakistan.

The U.S. military initially sent 15 helicopters and 3 C-130 Hercules aircraft to support relief efforts that, as of the end of August, had transported 2 million pounds of humanitarian assistance supplies and rescued 7,000 people. In the month following the flood, the United States provided \$150 million to support immediate relief efforts and set aside an additional \$50 million to reestablish communities affected by the floods.

Headquarters for U.S. Transportation Command Ready for a Moving Workforce

The U.S. Transportation Command (TRANSCOM) has officially opened its new headquarters facility at Scott Air Force Base, Illinois. The project, a result of the 2005 Base Closure and Realignment (BRAC) Commission recommendations, colocates the Military Surface Deployment and Distribution Command (SDDC) with TRANSCOM and the Air Mobility Command (AMC). SDDC is not only moving in with AMC; it is also consolidating three elements previously

housed at three different installations in Virginia to one campus and reducing TRANSCOM's footprint.

According to Steven Coyle, TRANSCOM director of BRAC transformation, the move brings the command a savings of \$1.2 billion and required \$130 million in improvements and upgrades to current command facilities. The upgrades include a new fusion center that will synchronize TRANSCOM's global strategic mobility operations and house the Joint Distribution Process and Analysis Center. The headquarters is also home to the new Joint Intelligence Operations Center for Transportation, which will provide in-depth intelligence analysis for the Fusion Center. The intelligence center is housed in a \$20 million addition funded by the Defense Intelligence Agency.

The Acquisition Center of Excellence is also a part of the new headquarters and incorporates the commercial contract activities of TRANSCOM, AMC, and SDDC. AMC's and SDDC's contracting functions were previously consolidated and have proven successful. A joint billing center will also improve support by consolidating comptroller billing and collection activities.

Other additions to the expanding TRANSCOM campus include upgrades and reconfigurations to Scott Air Force Base to house the AT21 [Agile Transportation for the 21st Century] Enterprise Integration Laboratory. In fiscal year 2012, the Global Patient Movement Requirements Center and the Defense Transportation Coordination Initiative Office/Distribution Portfolio Management branch will relocate to the campus from leased facilities off base.

Defense Logistics			
Agency Renames Units			
to Highlight Unity			
of Logistics Mission			

Navy Vice Admiral Alan Thompson, the director of the Defense Logistics Agency (DLA), announced an initiative in July designed to create unity among DLA logistics unites. The plan, called "We Are DLA," is a unified, single-agency approach that unites agency segments regardless of their geographic location and mission. Under the plan, DLA units will assume the following new names:

Former Name	New Name
Defense Supply Center Columbus	DLA Land and Maritime
Defense Supply Center Philadelphia	DLA Troop Support
Defense Supply Center Richmond	DLA Aviation
Defense Energy Support Center	DLA Energy
Defense Reutilization and Marketing Service	DLA Disposition Services
Defense Distribution Center	DLA Distribution
Defense Logistics Information Service	DLA Logistics Information Service
Document Automation and Production Service	DLA Document Services
Defense Automatic Addressing System Center	DLA Transaction Services
Defense National Stockpile Center	DLA Strategic Materials
DLA Europe and Africa	DLA Europe & Africa
DLA Central	DLA Central
DLA Pacific	DLA Pacific

Writing for Army Sustainment

If you are interested in submitting an article to Army Sustainment, here are a few suggestions. Before you begin writing, review a past issue of Army Sustainment; it will be your best guide. Then follow these rules:

- ☐ Keep your writing simple and straightforward (try reading it back to yourself or to a colleague).
- ☐ Attribute all quotes.
- ☐ Identify all acronyms, technical terms, and publications (for example, Field Manual [FM] 4–0, Sustainment).
- □ Do not assume that those reading your article are necessarily Soldiers or that they have background knowledge of your subject; Army Sustainment's readership is broad.
- □ Submissions should generally be between 800 and 4,000 words. (The word limit does not apply to Spectrum articles. Spectrum is a department of Army Sustainment intended to present researched, referenced articles typical of a scholarly journal.)

Instructions for Submitting an Article

- ☐ Army Sustainment publishes only original articles, so please do not send your article to other publications.
- □ Obtain official clearance for open publication from your public affairs office before submitting your article to Army Sustainment. Include the clearance statement from the public affairs office with your submission. Exceptions to the requirement for public affairs clearance include historical articles and those that reflect a personal opinion or contain a personal suggestion.
- □ Submit the article as a simple Microsoft Word document—not in layout format. We will determine layout for publication.
- ☐ Send photos and charts as separate documents. Make sure that all graphics can be opened for editing by the Army Sustainment staff.
- □ Send photos as .jpg or .tif files—at least 300 dpi. Photos may be in color or black and white. Photos embedded in Word or PowerPoint will not be used.
 - ☐ Include a description of each photo submitted and acronym definitions for charts.
 - □ Submit your article by email to leeealog@conus.army.mil or by mail to—

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If you mail your article, please include a digital copy on CD.

If you have questions about these requirements, please contact us at leeealog@conus.army.mil or (804) 765–4761 or DSN 539–4761. We look forward to hearing from you.

Statement of Ownership, Management, and Circulation

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Robert D. Paulus, 20 August 2010.

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US ARMY LOGISTICS UNIVERSITY
2401 QUARTERS ROAD
FORT LEE VIRGINIA 23801-1705

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